# Engineering and MINING JOURNAL

## INDEX TO VOLUME 122

July 1 to December 31, 1926

---

McGRAW-HILL PUBLISHING CO., INC.
10th AVENUE AT 36TH STREET
NEW YORK

Science
Walvs

# INDEX

**EXPLANATORY NOTE**

Illustrated articles are denoted by an asterisk (*); editorials by the letter "e"; and news items by the letter "n", as indicated at the foot of every page.

This index is made comprehensive but concise. Pains are taken to bring together matter belonging to the same subject so that when a reader looks up an article he will also be referred to related data.

Following is a list of the pages included in the numbers of the volume by date:

| | | | |
|---|---|---|---|
| July 3 | 1 | to | 40 |
| July 10 | 41 | to | 80 |
| July 17 | 81 | to | 120 |
| July 24 | 121 | to | 160 |
| July 31 | 161 | to | 200 |
| Aug. 7 | 201 | to | 240 |
| Aug. 14 | 241 | to | 280 |
| Aug. 21 | 281 | to | 320 |
| Aug. 28 | 321 | to | 360 |
| Sept. 4 | 361 | to | 400 |
| Sept. 11 | 401 | to | 440 |
| Sept. 18 | 441 | to | 480 |
| Sept. 25 | 481 | to | 520 |
| Oct. 2 | 521 | to | 560 |
| Oct. 9 | 561 | to | 600 |
| Oct. 16 | 601 | to | 640 |
| Oct. 23 | 641 | to | 680 |
| Oct. 30 | 681 | to | 720 |
| Nov. 6 | 721 | to | 760 |
| Nov. 13 | 761 | to | 800 |
| Nov. 20 | 801 | to | 840 |
| Nov. 27 | 841 | to | 880 |
| Dec. 4 | 881 | to | 920 |
| Dec. 11 | 921 | to | 960 |
| Dec. 18 | 961 | to | 1000 |
| Dec. 25 | 1001 | to | 1040 |

## A


Page

Abana ... 146
Reorganization ... n704
Sinks shaft ... n423
Abandoned mines yield profit ... n1026
Absentee mine owners ... e242
Accidents (see also Safety)—Air blast entombs miner ... n231
Helps in ore recovery ... n629
Hundred million dollar hazard ... e441
Iron-country ... e761, n*781, letter 859, n908
Metallurgical, in U. S. in 1924 ... 1033
Prevention ... 72
Acetylene generator, safe ... n315
Acken, C. S., on grubstakes ... letter 144
Adams mine electrified ... n*384
Adder, portable ... n*154
Administration, mine, Arizona course n112, e122
Graduate school ... e121
Advertising silver and gold ... e363
Advice, competent, needed ... e802
Aërial ambulance in Andes ... n*24
Aërial tramways ... n24, 632
Agitator, sizing, patent ... 353
Ahtell Creek, Alaska, silver-lead find ... n262
Ahumada Lead, report ... 954, n977
Aid, state, for miner ... e123
Air, compressed, and compressors, see Compressed Air.
Air blast entombs miner ... n231
Air filters, new ... n792, 912
Air flow, mine ... 1033
Airplanes—Alaska survey a success ... n465
Mapping, Rhodesian Congo ... n389
Prospecting for copper ... *576
Survey of Saskatchewan planned ... n786
Ajo, see New Cornelia.
Alaska—Aërial survey a success ... n465
Developments, recent ... n25
Dredging ... n905
Geology ... 114, 513, 675
Mineral production, 1925 ... n347
Reindeer industry grows ... n705
Relocation of claims ... 702
Roads aid mining ... n743
Alaska College assists in development ... n25
Alaska Juneau ... 226, 347, 508
In October ... n863
Production ... n828
Reports ... n24, 954
Alaska R.R., reduces deficit ... n906
Albania, petroleum in ... *404
Alberta, oil fields to be explored ... n668
Alchemy ... e3, letter 181
Alderson-McKay ... 145, 231, 348, *684, *724
Alenius, E. M. J., on United Verde coyote blast ... *44
Algarrobo iron mines, title established ... n983
Alkali Springs, Nev., lead-silver find ... n262
All Greek ... e282, 303, 534
Allenby, see Granby.
Allen and Billmyre Co. ... 911
Allis, Louis Co. ... 431
Allis Tex rope drive ... *538
Allis-Chalmers Mfg. Co. ... 432, 995
Alloys, Dr. Guertler talks on ... n791
Alloys, aluminum-silicon, discussed ... n910
Alluvials, testing and estimating, book review ... 392
Almaden operated more than 2,000 years ... n469
Alta Merger fire ... n629
Alumina, Haglund process ... 530
Aluminous rocks, replacement of ... letter 380, see also 130
Aluminum (see also Bauxite)—Achievement, in automobiles ... e323
Arvida plant production ... n587

Page

Aluminum—Continued
Bulletin on ... 1033
Cartel, European ... n664, n785
Copper wire competes with aluminum ... n305
German industry grows ... n784
German production ... n954
Largest plant ... n944
Norwegian industry ... n954
Outlook excellent ... 996
Prices ... 436, *437, 638, *797, 958, *959
Production reaches record ... 996
Aluminum Co. of America, new plant to open ... n109
Arvida plant production ... n587
Arvida plant to be world's largest ... n944
Aluminum-silicon alloys discussed ... n910
Amalgamated Broken Hill Silver Lead ... 348
Amalgamated Pioche, fire ... n421
Amalgamation, see Metallurgy.
Amazon ... 27
Amber, German production ... 455
Ambler, J. O., on compressed-air shovel ... *938
Ambulance aërial, in Andes ... n*24
America, dependence of ... e161
"Dependent America," book review ... 314
Amer. Association of Engineers ... n312
Amer. Ass'n. of Petroleum Geologists, meeting ... n191, e362, n830
Amer. Ass'n of State Geologists, meeting ... n711
Amer. Blower Co. ... 792, 912
American Eagles shaft, costs and methods ... *657
Amer. Eng. Co. ... 194
Amer. Eng. Council, board meeting ... n590
Amer. Engineering Standards Committee, yearbook ... 392
Exhibition ... n870
Amer. Inst. of Mining and Metallurgical Engineers—
Meeting, Denver ... n191, e362
Meeting, Pittsburgh ... n674
Montana section, meeting ... n191
N. Y. Section hears talk on alloys ... n791
Discusses Spain ... n830
Nominating committee wants suggestions ... n191
Northwest sections, meeting ... n590, n671
Petroleum Division meets ... n711
Saunders medal ... *12
St. Louis section, meeting ... n830
*Transactions* ... 832
*Transactions*, index ... 871
Amer. Metal Co., not affected by Daugherty-Miller trial ... n625
Pecos mine ... *1004
Report ... 239, 759
Amer. Mines & Smelting buys Caribou ... n786
Amer. Mining Congress, meeting in Denver ... e362, n*546
Convention ... n870
Idaho delegates ... n870
Program, Washington meeting ... n910
Washington meeting ... n*949, *987
Western Division, meeting ... n191
Amer. Petroleum Inst., meeting ... n869
American prosperity ... *772
Amer. Refractories Inst., meeting ... n710
Amer. Silver Producers' Ass'n., meeting n191, e363
Amer. Smelting & Ref. Co.—Adds 200 men at Garfield ... n704
Federal lead smelter ... *364
Limestone replacement deposits, Mexico *246, *289, e321
Carson suit, see Carson.
Garfield plant breaks record ... n1024
May buy Eagle-Picher ... n104
Parral, selective flotation at ... *644
Prosperity ... e521
Report ... 599
Selby smelter, thefts at ... n626
Smelter at Asarco, continuance asked ... n263
Amer. Soc. of Mech. Engineers, elects Schwab president ... n590
Meeting, Dec. 6 ... n910
Amer. Zinc, buys Big Chief ... n108
Report ... 197, 759
Amer. Zinc Institute, "Proceedings" ... 114
Amulet ... 668, *724, 1023
Anaconda — Anaconda-Harriman agreement with Poland ... n63
Bid for electrolytic zinc plant ... e42
Carson suit, see Carson.
Chile Copper issues bonds ... n996
Giesche company, Silesian-American Corp. n184
Hoist repair, quick ... n908
Leonard mine closed temporarily ... n786
Visited by capitalists ... n*944
Rewards heroism ... n539
Vs. Clark interests, Butte suit ... n703, n784, e802
Will sink Mountain Con ... n981
Anakie sapphire fields, state aid ... e123
Analysis, gas, filter for ... n*115
Analysis of cargo iron ore, correcting ... n264
Ancient man in Nevada ... letter 103
Ancient mining and metallurgy ... 48, 451, *649
Andean salares ... 419, correction 534
Anderson, P. M., address on South Africa 270
Anderson, R. J., views on aluminum ... 996
Andes Copper, miners strike ... n743
Anglo-Amer. Corp. ... 907
Wins in court ... n669
Anglo-Canadian Explorers ... 29
Angola, smelting iron in ... *179
Angular inclusions in ore veins, see Geology.
Ankerite, new mill ... n28
Enlarges cyanide plant ... n982
Ore hard to crush ... n588
Ankole Tin formed ... n867
Anna Beaver ... 345

Page

Antimony—American smelter, why not? ... e403
Bulletin on ... 1033
Gold-antimony mine in France ... *654
Metallurgy of ... 702
Prices ... 758, 958
Production, 1925 ... n783
Refinery at Trail, B. C. ... n862
Reserves are unknown ... 886
Shipments from Sonora ... n146
Yellow Pine, Idaho ... 675
Antisell, T., on mica mining and milling ... 894
Anyox, see Granby.
Apache Powder makes xanthate ... n424
Apatite, Canadian, mining languishes ... n147
Apex litigation at Butte ... n703, n784, e802
Apex Trinidad Oil ... 867
Apexes and lodes ... e802
Apparatus for charging zinc retorts ... 420
Appliances, approved ... 790
Aravaipa installs new mill ... n107
Arcadian Consol. ... 306, 388, 704, 743
Ardsley Butte unwaters old shaft ... n265
Area ... 1023
Argentina, metric system in ... letter 103
Nickel currency for ... n707
Argonaut ... 708
Finds rich copper ... n*426
Increases mill capacity ... n628
Mill, view ... n*426
Plymouth finds oreshoot ... n587
Arizona—Copper companies benefit by water power ... n261
Copper via Panama Canal ... n24
Coronado Trail opened ... n26
Desert has modern road ... n425
Floods hamper mining ... n707
Freight rates, lower ... n107
Globe-Miami district, history, etc. ... *849
Mines and railroads pay 50% of taxation n347
Mining activity increasing ... n23
Placer mining being revived ... n310
Projects, big, completed ... n665
Vanadium properties to be prospected ... n982
Arizona Central may sell stock ... n511
Arizona Power Co., line to Black Rock ... n983
Arizona Premier bought by Bevis Divide n783, n903
Arizona Univ., course in mine administration ... n112, e122
Experienced men as students ... n947
Postgraduate school ... n473
Armitage, P., portrait ... *988
Armstrong Machine Works ... 959
Arnold ... 467
Arsenic, prices ... 958
Arsenic, white, Mexican production ... n588
Arvida, see Aluminum Co.
Asbestos—Canadian, in 1925 ... n28
Canada production up ... n586
In Rhodesia ... n747
In war time ... e1
Mine waste as fertilizer ... n905
Production ... 876
Rhodesian industry expands ... 288
Tariff ... e1
Asbestos board, how to cut ... 379
Aspen, Colo., record find ... n664
Assaying, checking bullion ... 47
Tin, error in ... *616
Assessment work, more time in Quebec ... n467
And public roads ... e801, letter 941
Astronomy, elements, book on ... 832
Atascadero Colony, bankruptcy ... n64
Atlas ... 308
August dividends ... 359
Australia, gold—Find ... n709
Fields ... e923
Investigating committee ... n709
Problem ... n350
Producers want Government aid n152, n470
Shipments ... n470, n471
"High-grading" ... n311
Mica mines developed ... n470
Mining reports ... 712
Northern Territory resources, etc. ... n470
Australian Radium Corp. ... 709
Austria, iron and steel fall off ... n231
Automatic power regulation ... 774
Automobiles, aluminum in ... e323
And mining ... e203
Lights, bulletin on ... 712
Ayres, Col., warning on business ... n913
"Axiflo" pump ... 715


## B


B. & N. Mining Co., mine shows promise ... n1024
B. C. Silver ... 146
Finds bonanza ore ... n25
Completes surface plant ... n705
Operations ... n471
Babbitt, coefficient of friction ... 860
Bacharach Industrial Instrument Co. ... 514
Baffin Island explored ... n668
Bain, H. F. ... *549
Baker-Patten ... 466
Balbach Co. buys Stotter Metal Co. ... n189
Baldwin Gold reorganized ... n387
Baldwin-Kirkland, find ... n509
Organization ... n387
Ball, S. H. ... *554
Ball mills, see Mills.
Balliet, L., on cutting with illuminating gas letter 533, see also 304
On lessons from hoisting accident ... 614
On oxygen impurities ... *142
Baltic ... 540
Banding around rock fragments ... *491, letter 700, letter *1020
Banerjea, S. B., on Indian manganese and bauxite ... 254


*Illustrated; e, editorial; n, news

Page
Bannockburn, Ont., lead developed .....n263
Barberton, South Africa, renewed interest..n587
Barite, California deposit opened ..... n24
Claims purchased .....n426
Crude, sales increase .....n350
Barnes-Hecker mine disaster, see Cleveland-Cliffs.
Barnsdall estate consolidates mines.....n540
Barry-Hollinger .....230, 467
Mill starts .....n426
Barytes, freight rates unchanged .....n863
Basin, Mont., investment in .....n665
Basin-Montana Development refinanced ...n425
Basin Montana Tunnel Co. ..... 746
Bastian-Blessing Co. ..... 315
Bathurst Mines, Ltd., incorporated.....n1024
Batteries, see Electric.
Battery chargers, new ..... 393
Bauxite (see also Aluminum)—Alumina from, Haglund process ..... 530
Bulletin on .....1033
French production .....n504, 618
In Russia .....n948
India ..... 254
Since 1900 ..... *10
Baxter sold .....n107
Beaded pan conveyor, scraper for .....*776
Bearing, new ..... 74
Bearing metal, coefficient of friction ..... 860
Bearings, ball, roller and plain .....*739
Beaver Auxiliary, report on....letter 533, see also 470
Beaver Consol., affairs of.....470, letter 533
Dispute with Kirkland Lake .....n746
Election .....n667
Litigation .....n864
New directors rescind dividend .....n708
Sells shares to develop Elk Lake .....n470
Beers, F., & Co. ..... 476
Belgian Congo, see Congo.
Belgium, franc stabilized .....e721
Radium mines as asset .....n188
Zinc industry, paper on ..... 712
Zinc smelters fear electrolytic production .....n517
Belle Fourche Bentonite .....151, letter 182
Belmont Copper ..... 147
Not connected with Tonopah Belmont letter 224, see also 24
Shipments .....n426, n504
Belt conveyor, see Conveyors.
Belt drive vs. rope drive .....*538
Benguet Consol., report ..... 558
Bennett, gold find ..... n67
Bentonite, Black Hills deposit..n151, letter 182
Discovery in Wyoming .....n310
Berger, C. L. & Sons, Inc., manual ..... 715
Berghuis, Dr., oil from coal .....e841
Berkey, C. P., tribute to J. F. Kemp ....*872
Berrien, C. L. .....*313
Bevis Divide buys Arizona Premier ..n783, n903
Bickell group ..... 348
Big Bald Top Gravel ..... 385
Big Ben Consol., tall headframe .....n*827
Big Chief bought by Amer. Zinc .....n108
Big Jim completes flotation plant .....n226
Big Missouri .....n28, 146
Big O'Brien, now Gold Bar, reopening.... n64
Bingham mines ..... 505
Increased profits .....n424
Report ..... 954
Bingo, Pres. Myers dies .....n670
Birch Lake, claims recorded ..... n64
Bisbee Queen bought by United Verde Ex..n705
Bisichi Tin ..... 907
Bismuth, prices controlled by Europe ...n826
Bits, see Drills.
Black Hills, geology ..... 208
Half century of mining .....e201, *205
Black Rock, Ariz., to have power line...n983
Black sand, use as iron ore ..... 14
Blair, H., invents signal line .....n*354
Blast furnaces, see Smelting.
Blasting—Cap, patent ..... 114
Accident at United Verde.....n948
Canadian powder companies combine...n984
Cheaper powder for Canada expected..n984
Detonators, and tests for them ..... 500
Explosives, paper on ..... 72
Lake Denmark, N. J., explosion.....e241
Liquid oxygen, impurities and efficiency letter *143
Massive sulphide ores.....letter 464
Misfires, and how to prevent them .... 897
Nonpoisonous and safe powder.....letter 779, see also letter 662
Powder, old, causes accident ..... n27
Sealing joint between cap and fuse letter 61
Storing explosives .....*804
United Verde coyote blast ..... *44
Bleloch, W. E., and Boksburg Gap theory.n427
Blower, blast-furnace, new type .....n752
Blowers, see Ventilation.
Blue Bell Silver, and C. C. Julian .....e803
Blue Diamond Coal, report .....n348
Blue Goose, garden at office .....n*1025
Blue River Dredging Co. ..... 422
Blue-sky law, California .....e282, letters 303, 463, 534, 662, 779
Federal substitute proposed.....n949
Blueberry, Ford's new iron mine .....n540
Development work .....n864
Board of Tax Appeals, disputed valuations 170
Boilers, mercury ..... 702
Waste-heat, patent ..... 474
Work harder ..... 254
Boiler-gage light .....n*792
Boise Placer, hydraulicking .....n*421
Boise Rochester and Monarch consolidated n540
Boksburg Gap .....427, 471, 587
Boleo, labor strike .....n588
Production .....n823
Bolivia, highways .....n667
Tin, geology and research....letters 61, 381, 502, n541, 819
Tin, purity ..... 860
Bonanza claims ..... 263
Bonnet, two-piece, on valves .....n*274
Bonney mine optioned by Phelps-Dodge...n582
Reopened .....n664
Unwatered .....n1025
Bonus, novel, for Teck-Hughes manager ..n905
Books—"Business Annals" ..... 675
"Can We Compete Abroad?" ..... 832
"Chemical Engineering Catalog" ..... 790
"Corrosion, Causes and Prevention" .. 712
"Dependent America" ..... 314
"Dictionary, Spanish and Portuguese American, Mining Terms" .....1033
"Elements of Astronomy" ..... 832
"Gears and Gear Cutting" ..... 832
"Geology and Economic Minerals of Canada" ..... 352
"Geology Applied to Mining" ..... 314
"Geology, Ducktown Area" ..... 352
"Geology of Oil, Oil Shale, and Coal".. 951
German, on ore magmas ..... 271
"Handbook for Prospectors" ..... 832
"Igneous Rocks of Sudbury," etc. ..... 632
"Iron in Antiquity" ..... 192
"Location of Mineral Fields" ..... 790
"Market Data Book, 1926-1927"..... 871
"Mathematics for Engineers" ..... 675
"Metallography of Steel and Cast Iron" 192
"Metallurgy" ..... 871
"Methoden der angewandten Geophysik" 513
"Mineral Industry" ..... 591
"Mining Educator" ..... 474
"Modern Drying Machinery" ..... 871
"New Leadership in Industry"..... 951
"Potash, a Review, Estimate and Forecast" ..... 430
"Practical Structural Design" ..... 871
"Rocks and Rock Minerals" ..... 391
Statistical Abstract of the U. S., 1925" 871
"Text Book of Ore Dressing" ..... 591
"Today and Tomorrow" ..... 474
*Transactions*, A.I.M.E., index..... 871
"Versuch, usw., Magmatischen Erzlagerstätten" ..... 271
Borax, California .....1033
Bouery, P., on Mother Lode Mining, hydraulic .....*456
Boulder Perseverance ..... 250
Boulder Tungsten increases production ...n783
Dividend .....n109
Bowles, O., review of "Potash" ..... 430
Review of "Geology and Economic Minerals of Canada" ..... 352
Box car loader, new.....n*995
Boy Scout miners locate claims ..... n64
Boydell, H. C., on genesis of sulphide ores .....letter 21
Brakpan mine, fire .....n587
Brass direct from mixed ores ..... 771
Industry in U. S. ..... 352
Brazil, "lost" diamond mines ..... 498
Manganese, independent producers suspend .....n505
Minas Geraes, iron and steel manufacture. n387
St. John del Rey labor problems ..... 374
Brecciation .....e321
Briggs, Prof. H., on gold-antimony in France .....*654
Briquets, fuel, in 1925 ..... 72
Bristol Co. ..... 476
Surface plant, view .....n*543
Britannia Beach, see Howe Sound.
Britannia mills 3,300 tons daily .....n903
Operations, methods, etc. .....*924
Britanny, lead development .....n266
British Amer. Nickel, plant to reopen ...n1024
British Columbia—Dividends .....n583
Activity .....n*945
Handbook ..... 430
Kootenays chief center of mining.....n544
Mines operate at full capacity .....n471
Opportunities .....n671
Production increased .....n982
Properties bonded .....n427
Prospectors active .....n786
British Copper and Export Association....e961
British Empire Mining Congress .....n910
British Guiana, diamonds in.....n150, 1033
British Malaya, tin in.....letter 224
British Metal Corp.....e961
British Platinum & Gold ..... 427
British Porcupine to be sold .....n707
Bought by Vipond Consol. .....n954
"British goods are best" .....e442
Broken Hill, one main lode only .....n348
Bromine in chlorination of zinc sulphide .. 338
Brooks, L. H., Jr., on mine promotion and financing .....letter 102
Brown, O. M., on Bolivian tin ..letter 61, see also Bolivia.
Brown Instrument Co. ..... 592
Brownell, F. H. .....*549
Brunswick Consol. sued by Idaho-Maryland ..... n27
Buckets, see Hoisting.
Buckingham Mina ..... 29
Bucyrus Co. .....231, 833
Budget director and lower appropriations ..n386
Bullion, checking, against ore assay ..... 47
Bullion mine, mining without ore e81, letter 101
Bullion tax appeal, Nevada, lost .....n539
Bumper, track end for dump .....*142
Bundy Steam Trap Co. ..... 633
Bunker Hill & Sullivan ..... 628
Burch, A. .....*390
Bureau of Mines—Activities .....n66, 847
Appropriation, Oddie militant for .....n906
Appropriations cut .....n984
Branches, new, heads for .....n188
Develops operating economies .....n584
Expansion .....n309
Hampered by lack of funds .....n229
Bureau of Mines—Continued
New quarters ..... n26
Organization as of June 30, 1926 .....n106
Publications to be speeded .....n345
Receives S-51 bell .....n345
Reorganization .....n188
Report on mine accidents .....e441
Staff .....n309
Studies potash .....n345
Work, scope of .....n552
Bureau of Standards, twenty-fifth anniversary .....n870
Burgess, J. A., biography .....*284
Burke, M. B., tunnels Mosquito Gulch...n947
Burma, mines landslide .....n386
Tin discovery .....n231
Burma Corp. declares dividend ..... n67
Opens rich orebody .....n349
Railway restored .....n465
Report .....119, 759
Burner, oil, new ..... 476
Burroughs Adding Mach. Co. ..... 154
Busch, M., on cryolite importations..letter 22
Business, cycle, four-year .....e241
Artificial stimulation .....n913
Forecast for 1927 .....n835
Government in, Hoover's views.....n987
Organization ..... 871
Record volume expected ..... 399
"Business Annals," book review .....n675
Business men, hard-headed .....e482
Butte, apex litigation .....n703
Driving timbered raises .....*299
Featured in "Story of Copper" .....n350
Mining methods ..... 513
Butte section, A.I.M.E., meeting .....n191
Butte & London Copper..... 981
Negotiations for .....n384
Butte & Superior, opens copper ore on 3,400 level .....n703
Report ..... 38
Butte Copper Consol. ..... 981
Sells claims .....n666
Butte Hill Copper .....543, 746
Butterfly-Terrible ..... 308
Butters, C., on history of cyanidation letter 622, see also letter 1021
On mining in tropics .....*373
Bwana M'Kubwa, new plant ..... n29
Increases capital .....n985
Ore outcrop, view .....*577, *578
Production, etc. .....e921
Production report .....n747

## C

$CO_2$ meter ..... 514
Cadmium, refinery for Consol. M. & S. Co..n744
Industry grows .....1036
Solder, zinc-cadmium .....n744
Cages, see Hoisting.
Caldwell, H. W. & Son Co. ..... 633
Calera ..... 907
Calhoun, A. B., on hoisting problems 485, 524
California—Activities .....n582
Blue-sky law, see Blue-sky law.
Borax .....1033
Corporation Dept. protests.....letter 779, see also 662
Early mining, history .....1033
Fire endangers towns .....n267
Gypsum difficulties .....e442
Hydraulic mining investigation .....n507
Mother Lode mining .....*456
Northern, activities .....n824
Petroleum production .....n997
Prospects receive permits .....n784
Taxation .....e203
California Copper passes dividend .....n824
Callahan ..... 539
Completes mill .....n625
Producing .....n*862
Callbreath, J. F., Jr. .....*549
Portrait .....*949
Calumet & Arizona—Cobra Negra purchased ..... n664, n1025
Adds to Lordsburg holdings.....n942
Doing well .....n226
Sinks shaft at Mineral Park, Ariz. .....n231
Smelter output at Douglas makes record.n985
Sued by Carson .....n383
Calumet & Hecla .....743, 906
Adds more electric locomotives .....n467
Cliff mine to be reopened .....n704
Completes power line .....n1026
Construction program ..... n27
Danish pebbles for .....n187
Electric pump problem solved.....n985
Fourth furnace planned .....n467
Hoist installed .....n387
Increases mine force .....n150
Report .....239, n997
Saves on transportation .....n826
Seeks miners .....n229
To start long cross cut .....n423, n507
Cam & Motor, report.....n985
Cameron, Sen., copper investigation ..... n26
On copper trust .....n149
On internationalism ..... e41
Camp Verde, ancient man in.....letter 103
Campbell, S., wins in Idaho Copper case n266, n663
On public roads and assessment work .....letter 941, see also e801
Campbell, T. P., on why bother the engineer? .....letter 821, see also e603
Canada—Accumulates gold .....n667
Aid for prospectors .....n387
Asbestos production .....28, n586
Cobalt production increases .....n347
Feldspar production drops .....n745
Geology and economic minerals ..... 352
Gypsum production in 1925 ..... 450
Highways link mining districts .....n586

*Illustrated; e, editorial; n, news

Page

Canada—Continued
Iron and steel production grows ...n350, 699
Mineral industry advances .....n467
Mineral production, 1924 ..... 591
Minerals along Canadian Nat'l Rys. ..... 513
Mining shares over-valued? .....e602
Natural gas, prevention of waste sought n265
Nickel production grows .....n150
Non-metallic minerals, production, 1925 n867
Petroleum, capital invested..... 937
Petroleum output doubled ..... 886
Powder companies combine.....n984
Quartz production up .....n586
Resources ..... 192
Salt in 1925 ..... 221
Silver mines feel price drop .....n585
Soapstone and talc production increases n545
Talc ..... 930
Zinc production ..... 190
Canada del Oro being prospected .....n543
Canada Northern Power Corp. ..... 190
Canadian and American engineers meet....n671
Canadian Explosives, Ltd., in combine...n984
Canadian Geological Survey, summary report ..... 513
Canadian Ingersoll-Rand ..... 73
Canadian Inst., meeting .....n590, n671
What's wrong?.....e241, letter 260
Canadian Lorrain .....147, 310
Discovery .....n861
Shipment .....n667
Cananea smelter, reverberatory practice .. 501
Cananea Consol., ore strike denied .....n263
Canfield minerals for Smithsonian .....n747
Canyon Diablo meteorite, existence doubted *817
Capital, absentee, needed.....e242
Internationalism by .....e283
Mine, exceeds $7,000,000,000 .....n903
Scarce for mining.....letter 940
Will remain in Europe ..... 319
Capital Silver, report .....n348
Caps, see Blasting.
Capstan, new .....n*633
Car, box, loader for.....n*995
Car dumper, electrical.....n994
Car-Dumper & Equipment Co..... 115
Sold .....n194
Car spotter .....n*633
Car unloading machine, new .....n*155
Caracoles, aërial tramway ambulance .....n*24
Carbide vs. electric lamps .....e762
Carbon-black plant for Cisco, Utah..... n27
Carbon black from natural gas, bulletin.1033
Carbon dioxide flow meter ..... 514
Cariboo district, B. C. .....n228
Caribou bought by Amer. Mines & Smelting n786
Carnegie Inst. to continue research ..... n70
Carper, A. F., on American Eagles shaft ..*657
Carroll, "Bodie," analyzes prospecting....n984
Cars, mine, patent .....114, 192, 353
Carson, G. C., and patent case.....n383
n624, n625, e721, n746
Cartels, international ..... 990
Cascade tunnel, record advance? .....n511
Cascade Consol., and C. C. Julian .....e803
Cassiterite, see Tin.
Castelot, J., alchemist.....e3, letter 181
Castle ..... 310
Production .....n827
Castle-Trethewey ..... 388
Production ..... n66
Report .....n348, 517
Catalina Island, new concentrator .....n187
Catlin, R. M., on an adventure in oil shale.1031
Catlin Shale to make test .....n465
Cause and effect.....letter 382, see also e201
Cave-in-Rock mine.....*731, see also *695
Cecil, G., on mica in India..... 937
Cedar Creek, B. C. ..... 28
Celebrities' gallery .....e562
Cement, chrome, new ..... 593
Copper slags for cement ..... 20
In 1924 ..... 591
Since 1900 ..... *10
Centennial ..... 348
Centers, mining, passing of .....e281
Central Copper ..... 425
Concentrator's first run .....n666
Will build new unit .....n705
Central Machine Works ..... 233
Central Manitoba Mines ..... 29
Financed .....n508
May increase capital .....n264
Plans .....n827
Will offer shares .....n902
Central Manitoba Ry. withdraws application n344
Central Provinces Manganese ..... 948
Century Zinc.....263, 865
Chalk cliffs, chert in.....letter *701
Champion ..... 540
Optioned .....n865
Chaplin, S. on California blue-sky law letter 662, see also Blue-sky law
Charging zinc retorts, apparatus ..... 420
Charleston, S. C., Mining & Mfg. Co., view *811
Charlton, D. E. A., on a timbering job ... 93
Chapman, T., on better zinc market news e681, letter 701
Checking bullion against ore assay ..... 47
Chemical experiments and cookstoves..letter 181
Chemical & Metallurgical Corp. ..... 349
"Chemical Engineering Catalog" ..... 790
Chem., Met. & Mining Soc. meets ...n590, n711
Chemist, imaginative, and practical engineers .....e322
Chemistry, march of .....e963
Chemistry of ore solutions.....letter 224
Chert in chalk cliffs.....letter *701
Chicago engineers win strike ..... n64
Chicago Automatic Conveyor Co. ..... 155
Chicago Fire Brick Co. ..... 315
Chicago Mines Corp. buys Premier zinc mine .....n106
Chicago Pneumatic Tool Co. ..... 274

Page

Chief Consol..... 307
Increases production .....n264
Report .....38, 439, 997
Chile, American industry in ..... 712
Copper exports to U. S. decline .....n505
Geological map of part of Chile ..... 675
Has four copper smelters..... 377
Nitrate .....675, 712
Depressed .....n471, n947
Genesis of.....letter 182, letter 660
Producers' problem .....e242, n264
Versus Cornwall in copper .....e602
Chile Copper, report ..... 558
Issues bonds .....n996
Chimney, smelter, tallest American ..... 392
China, antimony and lead concessions to Germans .....n469
Copper and sulphur ..... 430
Tungsten production increases .....n264
Chinaman chutes for stockpile reclamation .....*460
Chisem, P. B., on sealing cap and fuse joint .....letter 61
Chloride district, Ariz., properties optioned n468
Denied .....n505
Chloride Mining Co., mill .....n385
Chlorination, see Metallurgy.
Chrome, India, shipments .....n188
Cement, new ..... 593
Chromite in chromium, determining ..... 259
Chromium, ferroalloy, patent ..... 392
Chromite, determining..... 259
In demand .....n110
Plating to be exploited .....n158
Plating, by General Motors ..... 47
Uses for, further ..... 774
Chromium Corp. of America ..... 158
Cinderella-East Rand consolidation .....n267
Cinema, see Motion Pictures.
Circuit breakers, new device for .....n*752
New, oil .....n593
New, single-pole ..... 476
Circular saw, portable .....*714
Claim holders should work.....letter 534, see also 303
Claims, assessment work and public roads e801
Claim jumping, a misdemeanor .....e402
Clapp, F. G., on oil development .....*571
Clara-Swansea organized .....n1025
Clark interests vs. Anaconda, Butte suit n703, n784, e802
Classification of ground for mining ..*368, *413
Classifiers, see Ore Dressing.
Clay, output increased in 1925 .....n471
Cleaning device for elevator bucket .....*537
Cleaning oil reservoir, gasoline engine..... 223
Clearwater Lake prospected .....n745
Clein, F. G., one-man mine .....n588
Clericy Mines, Ltd., organized .....n586
Cleveland-Cliffs buys Wade .....n229
Barnes-Hecker disaster...e761, n*781, n826, n827, letter 859, n862, n908
Cliff Mine, see Calumet & Hecla Consol.
Clinchfield Products Corp., view .....*411
Coal—Book for British miners ..... 474
Briquets in 1925 ..... 72
Coal and steel trust, Franco-German ...e283
Discussed at A.I.M.E. meeting .....n674
Geology, book on..... 951
Handling at Port Kembla.....1012
Italy, new regime .....n266
Oil from .....e841
Powdered, in Japan ..... 854
Stoker, improved power-feed .....n*431
Cobalt—Canada, production increases ....n347
Extraction, patent ..... 192
In 1924 ..... 114
Cobalt Contact ..... 65
Cobalt-nickel separation, patent ..... 392
Cobra Negra purchased? .....n664
Bought by C. & A.....n1025
Code, tap, for miners.....letter 700
Coeur d'Alene, see Idaho.
CoKal Stoker Corp. ..... 431
Coke and byproducts in 1923 ..... 72
Coke stoves for sintering ....*412, letter 535
Cokeville Phosphate Co. ..... 467
Colcord, R. K., on Comstock barren belt e81, letter 101
Cold Lake, Man., copper-zinc deposits ....n545
Coley process, zinc smelting..... 951
Collector, side-arm .....*142
Collett, H. F., on iron in Colombia and Venezuela.....letter 304, see also 84
Colloidal fuel ..... 780
Colloids, removal, patent ..... 273
Colombia, iron.....letter 304, see also 84
Platinum placers, equipment .....*339
Colombia Emerald Dev. Corp. .....e602
Colorado, feldspar and fluorspar for the East .....n783
Large projects under way .....n425
Mining notes .....n664, n783
Old mines, news of .....n706
Shortage of miners .....n863
Colo. School of Mines, officials visit Joplin n30
Progress .....e722
Colorado Zinc-Lead, mill may be enlarged..n864
Columbia Vari-Speed Co. ..... 514
Combinations, growth of .....e481
Combined Metals, flotation and leaching.n*542
Commerce mine, installs Diesels .....n*306
Power development .....n627
To build new mill .....n742
Company he keeps .....e602
Company reports, more informative .....e402
Complex Sudbury ores developed .....n629
Compressed air—Compressors, portable ...n194
Now motor-driven ..... 715
Low-pressure, measuring volume of ....*257
Shovel, compressed-air .....*938
Welder and compressor in one .....n274
Compressor unloader, faulty operation...*1019
Comstock mines, production .....n383
Comstock Lode, mining without ore...e81, letter 101

Page

Comstock Merger ..... 586
Production .....n67, n186
To suspend .....n741
Cessation of operations .....e843
Comstock Silver, shipments .....n384, n665
Concentrates, sampling, in bins .....*378
Concentration, see Ore Dressing.
Concheno ..... 907
Concrete building units ..... 430
Congo, Belgian, exports to U. S. increase ..n545
Mining in ..... 459
Prospecting in ..... 871
Congress mine, ore possibilities .....*769
Coniagas .....*724, see also *684
Coniaurum, discovery .....n861
Consol. Coppermines, sells ore to Nevada Consol. .....n107
Consol. Cortez ..... 385
Consol. Gold Fields.....1029
Consol. Goldfields in Joplin-Miami field ...n627
Consol. Homestake ..... 306
Consolidated Mining & Smelting Co. *684, *724
Bonus and dividend ..... n25
Enlarges zinc plant .....n586
Expansion .....n*185
Increases production .....n104
Increases zinc and lead capacity .....n705
Machine shop, view .....*169
Operations .....n471
Output will exceed 1925 .....n511
Profit .....n225
Seeks phosphates .....n305
Sullivan concentrator, view .....n*185
Sullivan mine, electrolytic zinc plant .. e42
Kellogg plant begun .....n108
Mine and mill described .....n*749
Ore, microscopic features .....*375, letter 899
Power for .....n469
Switchboard at plant .....*174
To add cadmium refinery .....n744
Trail smelter, receipts and shipmentsn146, n945.
View .....n*185
Trail, smoke damage to be arbitrated ..n904
Consol. West Dome ..... 544
"Contemporary," on use of objective..e241, letter 260
Contract system at Elm Orlu .....n672
Converting, loss of copper and nickel ..... 578
Conveyor Sales Co. ..... 432
Conveyors, belt, new use for ..... 393
Chains, patent process ..... 273
Inclined, lock for .....*460
Pan, scraper for .....*776
Portable belt .....n*393
Shaking, drive for .....n*432
Cook, P. R., on the prospector.....letter 859
Cooke, L. H., on underground orientation by Weiss method .....letter 820
Cookstoves, chemical experiments and letter 181
Coolidge Dam, copper competes with aluminum .....n305
Cooling mine air .....e842
Cooper, C. M., on Globe-Miami .....*849
Copper—American, dependent on Europe..n582
African coppers .....e921
Arizona via Panama Canal ..... n24
British, and Export Association.....e961
British refinery proposed .....n119
Butte & Superior opens ore on 3,400 level .....n703
Cameron, Senator, sees trust .....n149
Chile has four smelters ..... 377
Chinese ..... 430
Concentrator, new, United Verde.....*976
Consumption by industries .....n319
Converting, loss in ..... 578
Cornwall vs. Chile .....e602
Copper-zinc at Cold Lake, Man. .....n545
Discussed at Amer. Mining Congress.... 992
Eastern states, bulletin on.....1033
Economics, interest in .....e161
Electric refrigeration requires much copper .....n424
Electrolytic, prices *77, *277, 636, *795, *957
Experiments to reduce losses .....n664
Export association, and exports, see Copper Export Ass'n
Exports and imports ..... 439
Find at La Sarre, Que. .....n709
Find in Ontario .....n585
Foreign competition ..... 552
Freight rate, Pittsburgh-Detroit, protest made .....n984
Freight rates, increase denied .....n906
Getting acquainted with copper .....e363
Globe-Miami district history, etc. .....*849
Haiti .....*829
Imports from Chile fall off.....n505
In 1924 ..... 114
In Idaho, Utah and Washington in 1924. 72
Interest revives in London .....n747
Investigation .....n26, n66
Katanga expansion hindered by labor....n147
Katanga production .....459, 876
Kennecott increases dividend rate e841, n875
Lake shipments to Dec. 15 .....n904
Leaching ..... 72
Patent ..... 790
Lightning rods ..... 367
Lime silicates, Ducktown Area ..... 352
Market .....e121
Mexico, new zone .....n509
Michigan:
Copper Range production.....n1026
Dip needle prospecting .....n588
Exploration, active .....n983
Keweenaw properties, sale.....n421
Labor at mines .....n708
Labor shortage .....n510
Methods, survey begun .....n265

*Illustrated; e, editorial; n, news

Page

Copper—Michigan (Continued)
Miners return ....n783
Mines ready for large production....n665
Motion pictures ....n145, 350
Payroll increasing ....n906
Production ....n997
Tax may be lowered ....n347
Copper:
Montana, in 1924.... 114
Nevada, bulletin on....1033
New Brunswick find .... n64
Nickel-copper, Sudbury, geology of ... 632
Ocean rates ....n997
Ontario, interest in....n986
Open pit practice at United Verde.... 192
Ore, estimation in mines ....*531
Ore reserves ....n469
Ore treatment, patent .... 474
Output, record, at Douglas, Ariz....n985
Precipitation, patent .... 114
Price, "normal" ....e1002
Prices ....e281, 436, *437, n479, 638, 758, *797, 958, *959.
Kennecott increases dividend rate e841, n875
Low, reasons for ....n479
No time to cut....e281
Producers, leading ....1022
Production ....758, 876
Eastern states, U. S. ....n828
No time to cut ....e281
Prospecting by airplane ....*576
Quebec zone extension ....n745
Research work at Houghton ....n785
Rocking the boat ....e121, letter, with editorial comment, 462
Scrap, production .... 198
Shipments via Panama Canal ....n308
Shortage ....e121
Since 1900 .... *5
Situation at mines ....111, 268, 472, 630, 788
Slag, in construction work....*285, e323
Slags for cement .... 20
South Africa, prospecting by airplane..*576
Statistics, U. S. .... 39
Statistics, current, review of ....278, *279
Stocks increase with higher production.n997
"Story of Copper," motion picture..n145, n*265, n350, n863.
Tariff .... e41
Engineering advice vs. tariff....n106
Wales, industry declines ....n389
Wire competes with aluminum, ....n305
Copper-zinc at Cold Lake, Man....n545
Copper Export Ass'n (Copper Exporters, Inc.) ....107, 149, 161, 190, 231, e401, 639, e641, 667, e761, e961.
Copper Gold Mines .... 470
Copper King unwatered ....n704
Reopened ....n982
Copper Queen, see Phelps Dodge.
Copper Range, production less .... n68
Production near 2,000,000 lb. per month ....n1026
Trimountain makes profit ....n540
Coppus Eng. Co. .... 753
Corduroy for recovering free gold .... 822
Core drill, patent .... 632
Cork-Province reorganizes ....n827
Cornwall, tin mining gains .... n29
Versus Chile in copper ....e602
Coronado Trail opened .... n26
Corrosion ....712, n791
Corrugated sheets, shear for ....n*834
Costs—Determined by ground classification ....*368, *413
Economies developed by Bureau of Mines.n584
Hollinger Consol ....n25, n466
Joplin-Miami costs increase ....n346
Rand working costs decline ....n629
Silver, Ontario lower....n745
Smelting, at Noranda ....n465
Cottrell method of fume precipitation.... 72
Coulter, W. J., on drilling at Anyox ....*884
Counter-current decantation vs. filtration letter 382
Couplings, flexible ....n*32, *116, *715
Sykes universal flexible ....n*32
Coyote blast, see Blasting.
Cranbrook, B. C., meeting ....n590
Crane, stockpile....*740
Cranston, R. E., on Colombian platinum..*339
Crazy Girl, compressor at ....n903
Creighton, nickel mining.... 72
Cresson, see Golden Cycle
Cripple Creek ....e681
Find may mean new era....n945
Gases studied ....n386
Paper on Cripple Creek....n551
Crocker, W., on politics in mining game.. letter 181
Crooks in the mining business....e482
Cross-tie, steel ....n*315
Crossman, P., on Joplin geology .... e2
Crowder, J. P., on junction of shafts.... *55
Crown grants, validity ....n231
Crown King, property sold ....n467
Crown Reserve, closed .... n67
New Crown Reserve Consol ....n628
Crushing, see Mills.
Cryolite, importations ....letter 22
Bulletin on ....1033
Crystal Carbon Co. .... 27
Crystal Copper, Goldsmith mine fire....n386
Leases mine to Clark....n585
Cuba, hauling heavy machinery ....*660
Cubes in grinding, see Mills.
Cullity, E. R., on small mills ....n555
Curlew .... 425
Currency, nickel, for Argentina ....n707
Currents, electric, stray.... 768
Curves, metal, prices, see Prices
Cusi Mexicana and San Miguel merge.... n63
Cusihuiriachic, Mex., view ....*809
Cussedness ....e961
Custer County, see Idaho.

Page

Cutler-Hammer Co. .... 116
Cutting with illuminating gas ..304, letter 533 (see also front cover, issue of July 17, 1926)
Cyanide process, see Metallurgy.
Cyclone classifier, patent .... 353
Cynide Gold, competent advice needed ..e802

D

Daisy vein ....*731, see also *695
Danish pebbles, see Mills.
Daugherty-Miller case ....n625
Davis., R. M., review of "Business Annals". 675
Review of "Can We Compete Abroad?".. 832
De Lion, G. & M., alleged "salting" case..n588
Debt, foreign, to U. S. .... 319
Decantation, counter-current, vs. filtration.. letter 382
Deepest mine ....n191, e441
Del Norte, Colo., gold find near ....n585
Delano leaches ore in place....n1025
Demand for minerals, future ....n550
Demand for raw materials....e921
Demarest, reopened ....n*824
Democracy ....e643
Denver meeting of societies ..n191, e362, n*546
Dependence of America....e161
"Dependent America," book review.... 314
Design, structural, book review .... 871
Devil's Canyon, lake drained for gold....n422
Dewatering, mine, diagram ....*775
Diablo Canyon meteorite, existence doubted.*817
Diamond Creek project ....n864
Diamond drills, see Drills.
Diamonds—Brazil, "lost" mines .... 498
British Guiana ....n150, 1033
Find of 44-carat stone ....n230
Market improves ....n541
South Africa, see South Africa.
Dictatorship of the engineer ....e603
"Dictionary, Spanish and Portuguese American Mining Terms"....1033
Diesels, high-speed, for shovels ....n*74
Installed by Commerce ....n*306
Lubricator, force-feed ....n*115
Quick-starting ....n752
Differential flotation, see Ore Dressing.
Dike, C. F., plans concentrator ....n187
Dikes, see Geology.
Dinneen, W. T., on *Engineering and Mining Journal* ....letter 859
Dip needle prospecting for copper....n588
Dirt-removal system "Tabco"....n911
Disasters, Barnes-Hecker, etc. .e761, n*781, letter 859
Divide mine .... 263
Dividends, mining.198, 359, 518, 718, 876, 1035
Utah 10 per cent greater than 1925....n505
Doctor's view on mining ..e763, see also 900 and 1021.
Doherty, H. L., replies to Hughes....e401
Dolores-Esperanza, view....*140
Dome ....146, 190, 628
At Red Lake .... n28
August operations ....n470
Dividend ....n544, n997
Drills 22-ft. orebody ....n905
Drops Howey options ....n348
Equipment at Red Lake ....n107
Explosion kills three ....n388
Operations, paper on....1033
Production .... 876
Production decreases ....n310
Report ....197, 1029
Sells Howey shares to Hammell....n541
Dome Mining Corp. (Spain) .... 110
Dominion Iron & Steel, receiver for....n190
Doors, dump, in winze sinking ....*141
Dorman volatilization process....letter 22
Dorr Co. .... 431
Dougherty, E. Y., on replacement of aluminous rocks ....letter 380, see also 130
Douglas, C. B. E., on banding around rock fragments ....letter 700, see also *491
Dravo-Doyle Co. .... 432
Dredges—American, and engineers....letter 502
Feature of Alaskan activity ....n905
Gold, patent .... 474
Large dredge for Siberia .... 857
Suction cutter dredge fails....n1029
Suction dredges fail in Malaya.... n67
Tin, Malay States, view ....*298
Dredging Development Co., Ltd., shares lag.n190
Drifting record? ....e802
Drifting record at Gowganda .... n67
Drills (and Bits)—Diamond, used by Nacozari ....n349
Drilling with detachable bits at Anyox..*884
Electric, ¼-inch....n274
Ground classification....*368, see also *413
Lubrication .... *13
Patents ....114, 192, *273, 353, 474, 632, 712, 790, 952.
Drive for shaking conveyor....n*432
Driving timbered raises, Butte ....*299
Drying furnace, patent .... 632
Drying machinery, book on .... 871
Ducktown Area, geology, book review.... 352
Dumper, car, electrical .... 994
Dumps, doors in winze sinking ....*141
Skip, working model ....*739
Track end for ....*142
Dunwell increases capital ....n588
Duplex to build mill ....n704
Duprat prospected electrically....n1024
Durango, Mex., limestone deposits..*289, see also *246
Durango-Mazatlan auto road ....n866
Dust-collecting system, new....n953
Dust collector, patent .... 353
Dust-removal system, "Tabco" ....n911
Duthie, Henderson strikes rich ore.... n27
Ships high-grade ore ....n388
Dye, R. E., on repulping box....1019

Page

E

Eagle Lead to develop Wilcox mine....n1024
Eagle-Picher, may be bought by A. S. & R..n104
Earth, interior of .... 114
Earth-wave travel, see Geology.
Earthquakes ....letter 382, see also e201, e642
Earthquake, Montana, paper on....1033
St. Lawrence ....e201
Underground ....e642
East Geduld organized ....n628
East Kootenay, B. C., development ....n745
East Rand-Cinderella consolidation....n267
Eastern states, gold, etc., bulletin on....1033
Easton, S. A., new pres., Amer. Mining Congress ....n*987
Eaton, L., biography ....*164
Eccentric motion, multiple, by new device.n*676
Economic geologists, meeting.... 992
*Economic Geology*....72, 430
Economics—Business cycle, four-year ....e241
Capital, absentee, needed ....e242
Capital, internationalism by....e283
Capital will remain in Europe.... 310
Cartels, international .... 990
Executives and profit sharing....e562
Free trade for Europe ....e682
Government and industry....e1003
Industrial leadership, book on.... 951
Internationalism by capital ....e283
Investment of surplus ....e801
Mechanical slaves and their masters....e883
Price control, beneficent....e403
Price level to last till 1930....n954
Profits in South African leasing.... 288
Prosperity, trend of ....e683
Trusts, laws against.... 988
Economies, operating, see Costs.
Edie Creek gold field, New Guinea, report on ....n828
Education—Alaska College assists in development .... n25
Allocation of time at Houghton....e323
Arizona Univ., postgraduate school....n473
Carnegie Inst. to continue research.... n70
Encouragement for mining engineers.. letter 101
Golden, Colo., progress at....e722
Graduate school of mining administration .... n112, e122
Mining engineering seniors, and others.e881
Nine years minimum at Lehigh ....n152
Princeton summer school tour....n473
Princeton Univ. seeks funds....n710
Rating of professors by students ....e201
Society for Promotion meets.... n30
Students, experienced men, at Tucson...n947
Timber treating, fellowship in....n473
Triangulation system at Houghton.... n25
Eductor, hydraulic, for sump drainage ....*621
Edwards, Colo., gold find near....n1025
Eerstegeluk, report ....n469
El Bote ....*324
El Favor .... 907
El Oro drops 1,000 men....n509
El Potosi .... 907
El Salvador Silver, investors charge fraud.n669
El Tajo mine, strike of miners....n151
Elandsputte diamond rush ....n151, e203
Electric—Battery chargers, new.... 393
Circuit breakers....476, 593, 752
Currents, stray .... 768
Flow meter, new ....n*592
Fuse, double-expulsion ....n834
Generators, largest ....n633
Hoisting, see Hoisting.
Lamp shows open circuit ....n*274
Lamps, vs. carbide ....e762
Machinery, control of ....e243
Meter, reads volts or amperes....n912
Meters, lamp shows open circuit....n*274
Motor, direct-current ....n431
Motor protection, complete ....n753
Motors, remote control favored....n*1034
Motors, time-delay attachment....n*995
Prospecting, see Prospecting.
Refrigeration, requires much copper....n424
Relays, new-type ....n*431, 912
Shovel ....*764
Soldering iron, new ....n*194
Speed reducer ....n*154
Starter, A. C., new.... 32
Starting equipment for motors....n*233
Stations, push-button, new ....n834
Storage battery eliminates horse haulage ....n1026
Switch, section ....n*155
Switch, parallel-throw ....n*32
Switchboard for substation control....n*116
Timer, for ore sampler....*938
Tramway, cable, electrically operated..*1018
Welding ....e163
Electric Controller & Mfg. Co. .... 233
Electric Point gets tax reduction.... n27
Electrification of Oliver mines....n*384
Electrolysis, electrolytic iron....e122, 372
Process, patent....*273
Electrolytic zinc plant for Coeur d' Alene e42
Refining, patents .... 952
Electrolytic Zinc.... 311
Electrothermic zinc smelting, patent....n474
Elk Lake, development ....n470
Ellis, E. W., on silver-lead concentration..*815
Ellis, W. N., on Federal lead smelter....*364
Elm Orlu, contract system at....n672
Elsie K.... 231
Emotionalism in mining investment.... e523
Empire .... 347
Empire (British) Mining Congress....n711
Empire Chief .... 664
Engels Copper, milling records ....n786
Engine, four-cylinder, develops 10-12 hp..n432
"Engineer," on lawyer's view of mining ....letter, 1021, see also e763, 900
Engineer Gold subsides....e563

*Illustrated; e, editorial; n, news

Page

*Engineering and Mining Journal*—
All Greek to letter writer....e282, letter 303
Annual review number supervised by G. J. Young .....n*909
Criticized .....letter 382, see also e201
Gealy, E. J., now member of staff....n*789
History and editorial staff ..... e1
Internationalism ..... e41
Market report, change suggested ..... 900
Statistical service, new .....e963
Why he discontinued .....letter 859
Engineering standards ..... 392
Engineers (see also Education)—And civilization .....n312
Advice, competent, needed .....e802
Another variant ..... e3
Chicago municipal engineers win strike.. n64
Dictatorship of engineer.....e603, letter 821
Encouragement for .....letter 101
Examining .....n671
Lure of mining .....letter 534
Mathematics for, book review..... 675
Mining, versatile .....e323
Mining as business or profession.....e522
Mosquito engineer .....e843
Nine years minimum at Lehigh.....n152
Noted:
Burgess, J. A. .....*284
Eaton, L. .....*164
Thorne, W. E. ..... *4
Practical, and imaginative chemist.....e322
Should weigh words .....n389
Since 1900 ..... 11
Why bother the engineer?.letter 821, see also e603
Engines, internal-combustion, heat-measuring device .....n*833
Enkeboll, A., on a prospect in Mexico.letter 940
Enterprise, to be reopened .....n467
Equations, graphical solution ..... 675
Equipment, see Machinery.
Erwin Feldspar Co. .....*692
Estimation of ore in copper mines.....*531
Eureka, Utah, Internatl. Smelting development .....n225
Eureka mine, shaft-measuring pockets....*222
Europe, efficiency impresses observer ....n424
And international trade.....e961
Free trade for .....e682
Manganese situation .....e601
Steel cartel .....e563
United States of Europe .....e603
Evans, J. R., on smelting iron in Angola..*179
"Everlasting" exhaust fan .....n792
Executives and profit sharing .....e562
Expansion, mining ..... e41
Experience of 7 men, 130 years.....n947
Explosion, New Jersey, damages mine.....n107
Explosives, see Blasting.
Exports, see Foreign Trade.
Eye hazards in mines .....e483
Eye protector, unbreakable .....n*155

## F

F. W. C. Mfg. Co. .....letters 662, 779
Fahrenwald sizer sold .....n431
Fairbanks, Alaska, dredging .....n387
Fairbanks Exploration Co., busy..... 189
Fairbanks-Morse Co. ..... 752
Fairbanks Steam Shovel Co. sold ..... n74
Falcon ..... 587
May option M'Tuga .....n510
Falk Corp. ..... 715
Fans, see Ventilation.
Farrar, D. F., on grinding feldspar.....*692
Farrel Foundry & Mach. Co. ..... 32
Fay, A. H., on Illinois-Kentucky fluorspar. *165, see also 623
On situation at mines ..111, 268, 472, 630, 788
Tours Southern iron region.....n*950
Federal, common stock dividend case.....n465
Largest Joplin-Miami producer .....n824
Lead smelter .....*364
Page mine, new mill for .....n383
Federated Malay States, see Malay States.
Federated Metals Corp. protests freight rate .....n984
Federation Tin mines .....n471
Flotation .....n828
Feeder, pneumatic, for heavy trips.....n*115
Feldspar, Canada, production drops .....n745
Colorado, for the East.....n783
Grinding, in Tennessee .....*692
Mill, new, in Denver .....n585
Production declined in 1925 ..... n29
Fellows, R. O., on bentonite in South Dakota .....letter 182
Fernald, H. B., portrait.....*988
Ferroalloys, patent ..... 392
Ferron, R. D. .....*475
Fertilizers, mineral, conference .....n350
Asbestos mine waste .....n905
Fibroc Insulation Co. ..... 912
Filters for air, new .....n792, 912
Filters, patent .....114, 192
For gas analysis ..... 115
Filtration, repulping box for filter cakes..1019
Filtration vs. counter-current decantation letter 382
Financing, mine, see Promotion.
Finding ore ..... 551
Finland, zinc-lead developed .....n306
First aid and mine rescue (see also Safety).e283
Meet .....n*428, *484
Room equipment ..... 490
"Flexoid" .....*116
Flin Flon ..... 745
Hydro-electric power .....n905
To have smelter .....n230

Page

Florida phosphate ..... 72
Flotation, see Ore Dressing.
Flow meter, electric, for gas analysis..... 514
Improved .....n*592
Flue dust concentration ..... 430
Flue dust loss of iron, 3 per cent of product .....n467
Fluorspar—Colorado, for the East .....n783
Analysis ..... 901
Bulletin on .....1033
Cryolite, importations .....letter 22
French, exploited .....n541
Illinois-Kentucky district, ore magmas, industry, etc .....*165, letter 623, *695, *731, e762, 790
Norwegian, threatens competition.....n983
Research ..... .....e723, *731, e762
Since 1900 ..... *8
South African mining..... 936
Foley ..... 230
Foos Gas Engine Co. ..... 74
Ford, H., book, "Today and Tomorrow".. 474
Names new iron mine Blueberry.....n540
Red Bird mine .....n*261
Truck, another use for .....n155
Works Palms-Book iron .....n345
Foreign debt to U. S. ..... 319
Foreign Trade—Copper, lead, zinc ..... 439
"Can We Compete Abroad?" book review ..... 832
Europe and international trade.....e961
Gold imports exceed exports ..... 318
Imports and exports, ores and metals.. 39, 230, 390, 599, 799, 914
Imports from Belgian Congo and Rhodesia n545
Increasing interest .....e682
Pig iron from India, not illegal .....n708
Steel exports to Far East gain.....n306
Study of foreign trade.....e922
Foremen, their function, etc. ..... n69
Forest Reserve and mining .....n552
Fort Scott, Kan., lead find .....n106
Foss, A. W., on shaft-measuring pockets..*222
France—Bauxite, Jan.-June, 1926 ..... 618
Bauxite production increases .....n504
Fluorspar, exploited .....n541
Franc fluctuation and mining shares...n310
Franco-German steel trust .....e283
Gold-antimony mine .....*654
Iron and steel, record activity.....n349
Iron and steel, exports .....n510
Lead, Britanny, developed .....n266
Locarno treaty .....e482
Mineral production increases .....n266
Mining laws harmonized .....n509
Pig iron, new record .....n510
Zinc ore imports increase in 1925....n109
Franchie, A., on Swauk district.....n*583
Fraser, D. D., on Cariboo district, B. C....n228
Free trade for Europe .....e682
Freeborn Eng. Co. buys Lebanon Lead & Zinc .....n425
Freeman, H., on genesis of sulphide ores.. letter 340, see also 21
Freeport Texas leases sulphur lands.....n470
Freezing, keeping solution tank from....*621
Freight Rates—And ore reserves ..... e82
Arizona ore, lower rates on .....n107
Considered by Commission .....n863
Copper, Pittsburgh-Detroit, protest made n984
Copper, increased rates denied .....n906
Ocean rates, copper and lead.....n997
Idaho lead, rate excessive .....n785
On Virginia iron, reduction demanded....n425
Fritz medal for E. A. Sperry .....n710
Fry, A. T., on lead-zinc concentration..letter 22
Fuel, liquid .....e841
Fuel briquets in 1925..... 72
Fuels, colloidal ..... 780
Fume, see Smoke.
Furnaces, see Smelting.
Fuse, electric double-expulsion .....n834
Fuses, see Blasting.
Future heat and power .....e841

## G

Gaika Gold, development ..... 545
Ganschow, W., Co. ..... 354
Gardens at Joplin mines .....n*1025
Gardens, prize, awards for .....n711
Gardthausen, C., retires .....n469
Gas, illuminating, cutting with ..304, letter 533
Gas, natural, see Petroleum.
Gas analysis, filter .....n*115
Gas formulas ..... 632
Gas masks, see Safety.
Gas-house liquor for leaching .....*855
Gases, mine, studied at Cripple Creek....n386
Gasoline engine, new .....n432
Cleaning oil reservoir ..... 223
Gasoline locomotives, see Locomotives.
Gaspe Peninsula, mineral possibilities....n867
Gate, transfer, for waste and ore .....*538
Gayford, E., on symbols in flow sheets.letter 778 see also *608
Gealy, E. J., now member of *E. M. J.* staff.n*789
Gear material, new ..... 912
Gears and gear cutting, book on..... 832
Geduld farm to be leased by Union Corp...n747
Geduld East, bid for .....n190
Gem to be reopened .....n582
Gem Lake, Man., gold find .....n425
General Chem. Co., Virginia mine expands.n981
General Elec. Co. .....32, 194, 274, 354, 393, 555, 593, 633, 714, 752, 753, 834, 911, 994, 995, 1034
General Eng. Co. buys MacIntosh machine..n393
General Motors adopts chromium plating.. 47
General Refractories Co. ..... 593
Generator, turbine, most powerful.....e242
Generators, largest ..... 633

Page

Genesis of sulphide ores ..letters 21, 340, 341
Geological Survey, efficiency.....e682
Plea for support .....n553
Work summarized ..... 886
Geological surveys, co-operation in.....n551
Geologists, petroleum, see Amer. Ass'n of Petroleum Geologists.
Geology—Aid in ore finding .....e361
Alaska .....114, 675
Aluminous rocks, replacement of..letter 380, see also 130
And ore finding..... 551
Andean salares .....419, correction 534
Banding around rock fragments..*491, letter 700, letter *1020
Black Hills ..... 208
Bolivian tin ....61, 303, 381, *491, 502, 819
Canada, book review ..... 352
Chemistry of ore solutions .....letter 224
Chert in chalk cliffs .....letter *701
Chile, part of, map..... 675
Coal, book on..... 951
Congress mine, geological history.....*769
Ducktown Area, book review ..... 352
Earth-wave travel method of prospecting .....*931
*Economic Geology*, see *Economic Geology*
From granite magma to ore magma..e842
Genesis of sulphide ores .....letters 21, 340, 361
"Geology Applied to Mining," book review ..... 314
Hypotheses, outrageous, value of.....e123
Interior of earth ..... 114
Italian ..... 72
Lead-zinc, chimneys in limestone....296, see also *246, *289
Limestone replacement deposits, Mexico *246, *289, e321
Magmas:
And igneous ore deposits ..... 430
Angular inclusions, etc., in ore veins. letter *777
From granite magma to ore magma .e842
German book, review by J. E. Spurr... 271
Kentucky-Illinois district .....*695, *731, e762
Magmas, dikes and veins..125, 130, 134, 380, 778, 858
Southeast Missouri district.....*968
Water and magmas .....e402
Microscopic features of Sullivan ore *375, letter 899
Nickel-copper ores, Sudbury, book review ..... 632
Nitrate, Chilean, genesis of.....letter 182
Ore cavities through mineralization stoping .....e321
Ore deposition .....e762
Ore veins, angular inclusions, etc..letter *777
Pennsylvania .....1033
Petroleum, book on..... 951
Pin-wheel theory for Joplin..... e2
Progress .....e483
Red Lake ..... 17
"Rocks and Rock Minerals," book review ..... 391
St. Lawrence earthquake .....e201
Successive banding around rock fragments in veins .....*491
Sulphide ores, genesis .....letter 21
Tin ores, secondary enrichment....letter 417
Veins, origin of ..letter 858 (see above, Geology, Magmas)
Victoria, bulletins ..... 513
Windermere area, B. C. ..... 430
World's ups and downs .....e883
Geophysics, German book on .....192, 513
Geophysical prospecting, see Prospecting.
Georgia Talc resumes .....n704
German petroleum institute .....n870
Germany—Aluminum industry grows....n784
Aluminum production .....n954
Amber production ..... 455
Financing of steel exports .....n229
German-French steel trust .....e283
Iron ore production to be subsidized....n190
Locarno treaty .....e482
Metal markets ..... 159
Metal outlook better.....n639
Potash production standardized.....n510
Geysers Development Co.....e962
Gibralter Sierra to extend tunnel.....n947
Giesche, see Harriman.
Gila River, Ariz., gaging station, view..n*703
Gilbert-Clifford builds concentrator..... n66
Gilbert Mammoth Last Hope suspends....n347
Property attached .....n943
Gladstone pays dividends .....n664
Globe & Phoenix (Rhodesia) comes to life .....n829
Mystery .....n985
Shares advance .....n867
Globe-Miami district, history, etc.....*849
Godfrey, see Oliver.
Gogebic County, Mich., sues Victoria Mining Co. .....n189
Gogebic Range history..... 848
Goggles, unbreakable .....n*155
Use in mines.....e483
Gold—Advertising the use of gold.....e363
America's largest camp .....e722
Another worry for miners ..e3, letter 181
Antimony-gold mine in France .....*654
Australia, see Australia.
Concentration, patent ..... 353
Congress mine, ore possibilities.....*769
Cyanide process, see Metallurgy.
Deep lode mining ends in Victoria.....n948
Dome, underground operations, paper on.1033
Dredge, large, for Siberia..... 857
Dredge, patent ..... 474
Dredging at Nome .....n*626

*Illustrated; e, editorial; n, news

Page

Gold—Continued
Eastern states, bulletin on .....1033
Edie Creek field, New Guinea, report on.n828
Extracting machine, patent ..... 192
Flotation ..... 871
Flotation, patent process..... 952
Flotation of pyritic ores, Rand..... 175
Half of production for Orient.....n427
Imports exceed exports .....n318
In Idaho, Utah and Washington in 1924. 72
India, bullion standard recommended...n311
Kalgoorlie, flotation ..... 20
Kirkland Lake district.....e962
Last area on Rand leased.....n628
Low-grade ore treated .....n628
Metallurgy, decantation vs. filtration..letter 382
Metallurgy in northern Ontario..... *94
Mexican exports to be balanced by imports .....n709
Milling practice at Homestake.....*564
Montana, in 1924 ..... 114
Nevada, bulletin on .....1033
New Guinea gold rush .....n311, n709
Nova Scotia ..... 675
Ontario, see Ontario.
Panama gold areas .....n*1027
Polar sea water, gold in .....1017
Prices .....958, *959
Producers, leading .....1022
Production in 1925..... 392
In U. S. in 1925..... n65
Production, eastern states, U. S.....n828
Recovery, use of corduroy..... 822
Since 1900 ..... *5
Situation at mines ..111, 268, 472, 630, 788
Slate Lake, Man., find.....n828
Sluiceway and screen, patent..... 192
South Africa, see South Africa.
Spain, placer mining in .....n110
Sweden, find reported .....n747
Trace .....e162
Transmutation of quicksilver ....e3, letter 181
Woman Lake, Ont., free gold found.... n25
Gold-antimony mine in France.....*654
Gold Bar to be reopened..... n64
Gold Circle ..... 151
Buys claims ..... n68
To build cyanide mill.....n346
Gold Circle, Nev., revives .....n424
Gold Coast, manganese mining.....n587
Gold Dredging & Power Corp. ..... 422
Gold Dust, Calif., café..... *99
Gold Fields Rhodesian Development options
Wanderer Gold .....n867
Gold Road reopened.....n625
Gold standard, for India ..... 438
Golden, see Colorado School of Mines.
Golden Center, dredge results .....n265
Golden Cycle raises dividend .....n783
Cresson mine equipment .....n864
Golden Horseshoe to close ..... n68
Closed .....n110
May be refinanced .....n349
Golden miracle, a .....e723
Golden Rod, first-aid team wins trip....n108
Mill burns .....n828
Goldfield Consol., rich ore found.....n825
Goldfields Amer. Dev. Co..... 627
Goldroad under new management..... n64
Goldsmith leased .....n585
Fire .....n386
Gopeng Consol. Tin Mines ..... 712
Gordon gas-house liquor process.....*855
Gordon smelting process .....n146
Government, function of .....letter 181
Government and industry .....e1003
Government ownership .....e843
Mine, fails in New Guinea.....n828, e843
Gowganda, drifting record ..... n67
Gowganda district .....310, n388
Grace and Star sold.....n470
Granby Consol. ..... 583
Allenby ..... 583
Increases output .....n146
Operations .....n471
Anyox, drilling with detachable bits....*884
On profit basis .....n425
Operations .....n471
Power house, view.....n*945
Report.....318, 835
Sintering plant completed .....n668
Granite magma to ore magma.....e842
Granite Mountain, North Butte and.....n187
Grants, crown, validity .....n231
Granulation of slags and metals..... 367
Graphical solution of equations..... 675
Graphite, production increased in 1925...n110
Grass Valley-South Star incorporated ....n424
Grasselli acquires pyrite mine .....n311
Gravity, specific, of solids, determination.. 537
Great Boulder Proprietary, passing....e403
Great Britain, "British goods are best"...e442
British copper and Export Association..e961
Copper refinery proposed .....n119
Mint, history of ..... 709
Postmark advertising .....e442
Great Northern ..... 348
Great Northern Blocks ..... 348
Great Western ..... 348
Greece, magnesite, etc., in 1925..... 656
Greenawalt, W. E., on sintering machines. letter 535, see also *412
Greene, G. U., on error in assaying tin...*616
On solubility of tin minerals....letter 417
Greene-Cananea ..... 588
Finishes construction program .....n263
Reports ore discovery.....n825
"Grefco" ..... 593
Grinder, portable pneumatic .....n*274
Grinding, see Mills.
Griswold, W. R., on chemistry of ore solutions .....letter 224
Ground classification for mining....*368, *413

Page

Grubstakes .....letter 144
Guanajuato depressed by fall of silver..n707
Mines suspend .....n825
Mines survive silver drop.....n983
Guertler, Dr. W. M., talks on alloys, etc..n791
Guggenheim dredge for Bolivian tin.....n666
Guidery, R., on dredges and engineers..letter 502
Guise, M. H. .....*670
Gulf Coast sulphur deposits.....*844
Gypsum, Canada, production ..... 450
Difficulties in California .....e442
Since 1900 ..... *10
Gyratory crushers, see Mills.

## H

Haffau mine.....*731, see also *695
Hafnium-zirconium separation, patent.....273
Haglund process, alumina production.... 530
Haig, Prof. R. M., on revenue act revision.n913
Haight, H. V., on new electric hoist.....n*73
Haiti Mines Co. develops copper property.n829
Hall, R. D., on mine safety.....n791
Hamilton, G. S., on cleaning oil reservoir of engine .....223
Hammell, J. E., buys Howey shares.....n541
Hammer, power, new.....n*233
Hammond, J. H., speaks on importance of mining .....n946
Hampden-Cloncurry for sale.....n311
"Handy-Andy" puller .....n*154
Hanna, M. A., Co..... 902
Hansen, Dr. O. L., on tap code.....letter 700
Hanson, H., on metallurgy in northern Ontario .....*94
Harley, G. F., on ground classification, *368, *413
Harrer, C. M., on driving timbered raises..*299
Harriman manganese concession.....n427, e601, n679, n985
First year .....n427
Harriman-Anaconda, agreement with Poland on Giesche .....n63
Hartford-Good Eagle, worked again .....n1026
Hats, hard, and conservatism.....e43
Hauck Mfg. Co.....792
Haulage, see Locomotives.
Hauling machinery in Cuba.....*660
Haut Katanga, see Katanga.
Hawthorne .....305, 466
Hawxhurst, R., Jr., on Andean salares, letter 419, correction 534
On Chilean nitrate.....letter 182
Hayes Nevada development.....n982
Hazeltine, I. B., on capital for mining.letter 940
Headframe, tall, Big Ben Consol.....n*827
Hearing, public, belated notice ..... e83
Heat, future sources .....e841
Heat controller, new.....n*476
Heat-recording device.....n*833
Heating device for roll shells.....*461
Hecla .....627
Bonds British Columbia prospect.....n226
Bonds Stampede group.....n471
Concentrating lead-silver .....*444
Report .....n997
Hector, abandoned prospect promises.....n506
Heiland, Dr. A. C., goes to Colorado School of Mines .....n*589
On prospecting with magnetometer..letter *59
Review of "Methoden der angewandten Geophysik" .....513
Hematite find in Sierra Leone .....n1029
Henderson, see Duthie.
Heroism rewarded by Anaconda.....n539
Hertzig, J., what's in a name?.....e1003
Hess, F. L. .....*549
Hewer, developments .....n908
"High-grading," arrest in Bisbee district...n63
Australia .....n311
Thefts at Selby smelter.....n626
Hillside, Ariz., busy.....n783
Hixon, H. W., on chert in chalk cliffs.letter*701
Hoisting—Accident, lessons from.....614
Brake, patent .....192
Buckets, cleaning .....*537
Electric, new .....n*73
Hoist, large, ordered by Nevada Consol..n432
Hoist, patent .....192
Horne hoist .....896
Problems, fundamental .....485, 524
Repair, quick, at Anaconda.....n908
Rope, testing .....114
Skip dump, working model.....*739
Small hoists, trolley for.....n*194
Hole River, Man., prospects near.....n65
Hollinger Consol .....25, 308
Expansion .....n864
Reduces cost .....n466
Holt, S. E., on earthquakes.....letter 382, see also e201
Holzheimer, F. W., on milling low-grade ore ..... 967
Homestake, half century, .....72, e201, *205, n*343
Haulage ..... 94
Milling practice .....*564
Homestead act .....letter 535
Hoover, H., campaign against waste.....e763
Speaks on business, at Mining Congress.n987
Hope Metals .....586
Horne mine, see Noranda.
Horse Mesa dam, work begun.....n108
Hoskins Iron to expand.....n828
Houghton, see Mich. College of Mines.
Housholder, E. R., on breaking rock with vinegar .....letter 342, see also 48
How to mine without ore.....e81, letter 101
Howe Sound, Britannia plant active.....n*148
Dividend .....n583
Report ..... 718
Howey options dropped by Dome.....n348
Sale of interest in.....n387
Shares bought by Hammell.....n541
To develop Red Lake property.....n541

Page

Howey Red Lake underwritten .....n746
Hubbell, A. H., on Denver mining congress.n*546
On leaching zinc-lead with gas-house liquor .....*855
On Pecos mine .....*1004
Report of American Mining Congress meeting .....n*987
Review of "Handbook for Prospectors". 832
Review of "New Leadership in Industry" 951
Hudson's Bay Co. claims minerals.....n827
Hughes, C. E., Doherty replies to.....e401
Humboldt smelter to close .....n1025
Humboldt Sulphur .....426, 466
Hungary, J. Smith of Boston.....e42
Hunt, H. D., mill sup't, Miami Copper....n*113
Hutton, W. M., on mine dewatering.....*775
Hydraulic mining, California, investigation.n507
Mother Lode .....*456
Hydrometallurgy, patents.....114, 353, 474
Progress .....e42
Hypotheses, outrageous, value of.....e123

## I

*Iconoclast, The,* of G. G. Rice.....e602
Idaho, absentee mine owner.....e242
Clearwater country, road urged .....n944
Coeur d'Alene:
Concentrators, active .....1036
Custer County ore developed.....n344
Properties consolidated .....n504
Prosperity .....n506
To have electrolytic zinc plant..... e42
Wage increase .....n466
Yukon Gold discontinues dredge.....n108
Delegates to Mining Congress.....n870
Early poster .....*214
Gold, silver, copper, lead, zinc in 1924.. 72
Handbook ..... 72
Lead freight rate excessive.....n785
Placer claims sold .....n625
Prospecting not dead .....n106
Idaho Copper Corp. .....e602
Loses suit against Campbell.....n663
Ruling against .....n266
Idaho Hewer resumes.....n541
Idaho Manganese Co., producing.....n904
Idaho-Maryland sues Brunswick Consol.. n27
Ideas, exchanging, value of.....e723
Igneous ore deposits and magmas..... 430
Ilgner system, hoisting..... 527
Illinois, fluorspar, see Fluorspar.
Petroleum .....392, 952
Illuminating gas, cutting with...304, letter 533
Immigration, trend of .....e361
Imports, see Foreign Trade.
Inclusions, angular, in ore veins, see Geology.
Income tax ..... 989
Independence and production.....e242
India—Chrome shipments .....n188
Currency, commission, report, etc...311, 389, 438, 505, 548, 558, 742, 790
Manganese producers in agreement.....n948
Manganese and bauxite..... 254
Mica ..... 937
Minerals found in Chitral.....n584
Pig iron, duty on.....n505
Pig iron imports from India not illegal..n708
Silver, see above, India, Currency.
Indian Copper Corp. ..... 267
Seeks loan .....n150
Industry, leadership in, book on..... 951
Ingersoll-Rand ..... 73
Inspection, mine, state vs. county...n827, n908
Inspection, mine, by state, opposed.....n908
Inspiration Consol., fire.....n385
History, etc. ..... 852
Shipment, first, from leaching plant..n*943
Starts leaching plant .....n663
Institutes, what's wrong?.....e241, letter 260
Insulating material, new..... 714
Internal combustion engines, heat-measuring device .....n*833
International Mine Rescue and First Aid meet .....e283
Internat'l Nickel ..... 708
Buys electric locomotives.....n426
Buys Swedish patent .....n387
Reports .....319, 798, 914
Internat'l Smelting, development .....n504
Develops property at Eureka, Utah.....n225
New flotation plant at Rico..... n27
Opens new orebody .....n1024
Rico mill to double capacity .....n1026
View .....*851
Internationalism ..... e41
By capital .....e283
Interstate Commerce Com. denies increases on copper .....n906
Inventors, publication an aid to.....e721
Investment, mining, emotionalism in.....e523
Investment of surplus.....e801
Iowa City College, rating of professors by students .....e201
Iridium and iridio-platinum..... 901
Iron and Steel—Accidents, mine..e761, n*781, n826, n827; letter 859, n908
Alloys, patent ..... 392
Austria falls off.....n231
Barnes-Hecker mine disaster .....e761, n*781, letter 859
Black sand, use as ore..... 14
Canada, production grows .....n350, 699
Cartel, European.....n266, e563, n759
Colombia .....letter 304, see also 84
Direct from ore..... 967
Discussed at A.I.M.E. meeting.....n674
Discussed at Amer. Mining Congress.... 990
Electrolytic iron .....e122, 372
Experiments to reduce sulphur.....n664
France, exports .....n510
Record activity .....n349

*Illustrated; e, editorial; n, news

Page

Iron and Steel—Continued
Germany, financing of exports.....n229
Ore production to be subsidized.....n190
Gogebic Range history..... 848
In antiquity, book review..... 192
India, pig iron, duty on..n505, see also n708
Italy, new regime.....n266
Lake Superior ores, exhaustion.....e281
Loss in flue dust 3 per cent of product..n467
Marquette Range mines low-grade ore..n347
Mesabi shipments largest in history....n865
Metallography of steel and cast iron... 192
Michigan, new mine equipment.....n902
Minas Geraes, Brazil, manufacture.....n387
Ore, furnace stocks decreasing.....n427
Resources, world's .....*84, letter, 304
Shipments in 1925..... n26
Since 1900 ..... *5
Ore analysis, cargo, correcting.....n264
Pig iron, demand in Birmingham district.n189
France, new record .....n510
Higher tariff asked.....n627
Imports from India not illegal..n708, see also n505
Prices ..... 758
Refractories for open-hearth furnaces...n72
Situation at mines...111, 268, 472, 630, 788
Smelting in Angola.....*175
Spain, industry depressed.....n669
Statistics ..... 712
Steel and coal trust, Franco-German....e283
Steel exports to Far East gain.....n306
Sulphur elimination studied at Houghton.n785
Sweden, industry still depressed.....n226
Turnings, separating, from monel..... 100
Virginia, lower freight rates asked.....n425
Venezuela .....letter 304, see also 84
Iron Mountain increases capital.....n425
Ironwood miners caught by cave-in.....n539
Pabst shaft, view.....n*665
Rescue .....e561, n*581, n584
Italy, asbestos developments.....n266
Coal and iron regime, new.....n266
Conserves lead and zinc.....n545
Geology ..... 72
Iva Fern bonded.....n744
Mining .....n266

## J

Jack Waite ..... 347
Jackling, D. C., receives medal.....n*748
Jakins, G. F., on blasting massive sulphide ores .....letter 464
James, A., on decantation vs. filtration, letter 382
James, A., on early history of cyaniding, letter 1021, see also 622
Japan, at Sesquicentennial.....n350
Mining .....192, n506
Jarbidge option, United Eastern may drop.n426
Jefferson Milling Co..... 425
Jeffrey Mfg. Co..... 393
Jennings, S. J., portrait.....*990
Jerome, Ariz., fire.....n149
Jet, market for..... 420
Jewelry Shop ships .....n1028
Johannesburg Consol. Investment, report.n829
Johnson, Ariz., mining revives.....n263
Joiners, the .....e922
Jones, E. B., on storing explosives.....*804
Joplin Miami (see also Zinc)—Abandoned mines drilled deeper.....n540
Activity .....n584
Baxter sold .....n107
Concentrators, active .....n908
Cussedness, in field.....e961
Costs increase .....n346
Federal largest producer.....n824
Gardens at mines .....n*1025
Hauling ore, view.....n*308
Mills galore .....e243
Mills, new .....n865
Mills, view .....n468
Mills in operation number 155.....n226
Mine sales .....n742
Pin-wheel theory for..... e2
Premier mine sold.....n106
Quapaws sue for ore proceeds.....n583
Resumption after holiday.....n189
South African capital enters field.....n627
Tri-State Producers, election.....n870
Twenty-two tailing mills.....n584
Water shortage ends.....n347
Zinc-lead field .....*604
Julian, C. C., buys Monte Cristo.....n541
And Julian Merger Mines.....e803
Monte Cristo to have power line.....n983
Jumbo optioned .....n1026
Junction of shafts..... *55

## K

Kaaba may sell stock.....n511
Kalgoorlie, "high-grading" .....n311
Kalgoorlie pyritic gold, flotation..... 20
Kaolin, see Clay.
Kaslo, B. C., view.....*330
Katanga ..... 190
Buys into Nichols Copper.....n226
Copper production since 1911..... 459
Expansion retarded by labor.....n147
Labor problem .....e202
New stock issued .....n836
Ore reserves .....n231
Production .....876, e921
Production record, new..... n65
Report .....158, 479
To issue "privileged" shares.....n747
Katherine district, Ariz., operations.....n466
Katherine, rich find.....n145
Favorable development .....n905
Output $40,000 monthly.....n982
Katherine Extension ..... 706

Page

Kay Copper .....424, 543
Unwatering started .....n107
Keeley ..... 310
Keeley, production record .....n1024
Report .....197, n667, n861
Keiper, L., on prospecting and *Engineering and Mining Journal*—.letter 303, see also e282, 534
Kelleher, C., on Gulf Coast sulphur.....*844
Kellogg, Idaho, see Sullivan.
Kelly, S. F. .....*232
Kembla, Port, handling coal .....1012
Kemp, J. F., tributes to.....e883, *872
Kennecott, increases dividend rate...e841, n875
On $5 dividend basis.....e841, n875
Kennedy ..... 424
Completes electrical installation.....n826
Keno Syndicate ..... 586
Kentucky, ore magmas, fluorspar, etc...165, letter 623, *731, e762
Topographical surveys .....n711
Kepong Dredging Co. .....1029
Kertsch, Russia, a golden miracle.....e723
Keweenaw Copper .....n226, 421, 865
Keweenaw Silver, formed .....n585
Work started .....n827
Orders equipment .....n944
Keystone ..... 307
Keystone copper steel tie.....n*315
Keystone Lubricating Co..... 833
Keystone Metal Tie Corp..... 315
Kiln, rotary, for magnesia..... 430
Kimberley, B. C., meeting.....n590
King Island, Australia, tin find.....n110
Kingdon Lead financed by production....n*105
Kingman district, Ariz., active .....n1026
Kirkland Lake (district), activity..n187, e962
Additional power .....n827
Deeper development planned.....n986
Developments .....n230
Efforts to increase recovery.....n387
Power and rate dispute.....n28, n230, n388
Treats low-grade ore.....n628
Kirkland Lake Gold .....67, 230, 628
Development work .....n986
Ore reserves in dispute.....n746
Shares sold by Beaver Consol.....n470
Starts mill .....n585
Kirkland Rand ..... 184
Kithil, K. L., on prospecting by earth-wave travel method.....*931
Kittitas Dredging & Mining Co.....*583
Koeberlin, F. R., on geology of Bolivian tin.. letter 502, see also Bolivia
Kofa district, Arizona, new railroad.....n543
Kongo, see Congo.
Kootenays center of B. C. mining.....n544
Korea, lead and zinc mining.....n188
Kotzé, R., gets South African medal..... n70
To leave post .....n829
Krejci, M. W., on ancient man in Nevada, letter 103
Kriegh, M. W., portrait.....*988
Kryolith, importations .....letter 22
Kuhn, O. R., on world's iron ore.....*84, 304
Kutter's formula, application to gas..... 632

## L

L. O. X., see Blasting.
La Bessie Way to ship soon.....n349
La Dura ..... 907
La Plata ..... 664
Consolidates Colorado mines .....n905
La Rose ..... 230
Development financed .....n1023
New company, La Rose-Rouyn.....n348
Sale ratified .....n508
La Rose-Rouyn listed .....n1024
La Sarre, Que., copper find.....n709
Labbe, C., on keeping tank from freezing.*621
On lagging a slippery pulley.....*938
On track end for dump.....*142
Labor—And machinery in tropics.....e322
Coeur d'Alene wage increase.....n466
Colorado shortage .....n863
Comfort, at Federal smelter..... 367
Discussed at Amer. Mining Congress.... 991
Displaced by machinery, in Malaya.....e243
Katanga, problem .....e202
Liability, mine owner's ..... 773
Montana unions dissatisfied.....n904
Seven-day week .....e1002
Situation at mines..... 788
St. John del Rey problems..... 374
Strike, right to strike limited.....e722
Wages based on rock characteristics, *368, see also *413
Lagging a slippery pulley.....*938
Lake Creek Placer Mining Co. organized..n1025
Lake Denmark, N. J., explosion.....e241, 367
Lake Savant, gold rush.....n704
Noranda options claims.....n986
Lake Shore ..... 230
Deeper development .....n986
Dividend .....n954
Election .....n628
Mills 540 tons daily.....n544
Report .....n544
Lake Superior iron accidents see Iron.
Copper, shipments to Dec. 15.....n904
Ore shipments .....n189
Lake Superior Institute meeting.....n152
Lake Superior Steel Foundry Co. organized.n744
Lamb, M. R., on metric system.....letter 103
Lamp shows open circuit.....n*274
Lamps, carbide vs. electric.....e762
Land, public .....n551
Discussed at convention.....n546
Lane-Rincon resumes .....n*262
Lang, H., biography.....*204
Langi Logan United to close down.....n1029
Lanning, J. E., on U. V. concentrator ....*976
Last Chance .....65, 109
Law, reign of .....e1001
Lawson, A. W., on disputed valuations.... 170

Page

Lawyer's view of mining ..letter 1021, see also e763, 900
Le Roi Co..... 432
Leach, A. A., on estimation of copper in mines .....*531
Leaching, see Metallurgy.
Lead, S. D. .....e201, *205
Lead—Britanny, development .....n266
Cargo melted in train wreck.....n505
Discussed at Amer. Mining Congress.... 990
Eastern states, bulletin on .....1033
Exports and imports..... 439
Federal smelter .....*364
Find at Fort Scott, Kan.....n106
Flotation, lead carbonate.....1033
Idaho freight rate excessive.....n785
In Idaho, Utah and Washington in 1924. 72
Italy conserves lead for own use.....n545
Kingdon Lead, development, etc.....n*105
Korean mining .....n188
Leaching "in place"..... 702
Lead-zinc ore schedules..... 822
Lime silicates, Ducktown Area..... 352
Limestone replacement deposits, Mexico, *246, *289, e321
Mexican production .....n907
Mining and milling ..... 72
Montana, in 1924..... 114
Nevada, bulletin on .....1033
Ocean rates .....n997
Prices...77, 277, 436, 437, 636, 638, 758, 795, 797, *957, 958, *959
Producers, principal .....822, 1022
Production, eastern states, U. S.....n828
Refining, patent ..... 353
Scrap, production ..... 198
Silver-lead concentration, a problem in.*815
Since 1900 ..... *5
Situation at mines.....111, 268, 472, 630
Southeast Missouri ore-magmatic district .....*968
Statistics, current, review of.....278, *279
Sullivan ore, microscopic features.....*375
Lead carbonate, flotation .....1033
Lead-silver, concentration at Hecla .....*444
Ore in eastern Ontario.....n629
Situation at mines.....111, 472, 630
Lead-zinc, chimneys in limestone...296, see also *246, *289
Concentration, balancing sheets.....letter 22
Flotation, differential, significance of... e82
Okla.-Kan.-Mo. field.....*604
Ore schedules ..... 822
Pecos mine .....*1004
Situation at mines..... 268
Leadville, Colo., drainage project.....n863
Leasing mineral lands in South Africa..... 288
Leasing plan, extension to metal mining...n551
Lebanon Lead & Zinc sold.....n425
Legal Tender ..... 746
Lehigh Univ., nine years minimum for "engineer" .....n152
Leipzig trade fair.....n191
Leland, E., on deepening Pilares shaft....*569
Lena Goldfields .....n389, 510, 747, 787
Lenora ..... 146
Leonard mine, see Anaconda.
Lepidolite find, Washington.....n468
Lewis, E., general manager Broken Hill Proprietary .....n110
Lewis, J. B., on geologic features, Bolivian tin.letter 303, also 61, 381, *491, 502, 819
Lewis, Prof. J. V., on genesis of sulphide ores....letter 341, see also 21, 340
Review of "Geology Applied to Mining" 314
Review of "Rocks and Rock Minerals".. 391
Lewis, Gilman & Moore, bankruptcy..... n64
Lewisohn, F., and G. G. Rice.....e602
Lewisohn, S. A., book on industrial leadership ..... 951
Liability, mine owner's..... 773
Libraries and their use.....e443
Life line for signals.....n*354
Light for boiler gage.....n*792
Lighting, bulletins on..... 712
Lightning rods of copper..... 367
Lime in 1924..... 72
Lime circuit, Magna mill .....223, 898
Limestone—Lime silicates, Ducktown Area 352
Mining.....72, 392
Recovery from spalls.....e723
Replacement, Mexico .....*246, *289, e321
Since 1900..... *10
Sintering..... 430
Linares Mining Co., organized.....n664
Lincoln, high-grade ore found.....n908
Plans development .....n862
Lincoln, F. C., on Black Hills.....e201, *205
Lindgren, W.....*351
On magmas, dikes and veins....125, see also Geology, Magmas
Lindsey, W. H., portrait.....*990
Line Material Co ..... 834
Link-Belt Co. ..... 833
Linke, H. A., on classifier.....letter 342
Liquid fuel ..... e841
Liquid oxygen, see Blasting
Lithia, lepidolite find, Washington.....n*468
Lithographic stone in Manchuria..... 100
Little Hatchet sinks shaft .....n1025
Llallagua, tailings at.....letter 144
Loader, new for box cars.....n*995
Loads, concentrated, on measuring tapes..1033
Locarno treaty.....e482
"Location of Mineral Fields," book review 790
Lock for inclined conveyors.....*460
Lockris Nickel registered .....n310
Locomotives—Collector, side-arm.....*142
Electric .....72, 467
Gasoline, new.....n*476
Haulage at Homestake mine..... 94
New, requires less repairs.....n*994
Lodes and apexes.....e802
Looking backward .....e962
Loring, W. J., increases Arizona holdings..n387
Lorrain Trout Lake, report..... 158
Loughlin, G. F.....*549

*Illustrated; e, editorial; n, news

Page
Louisiana may get geological survey..... n70
Low-grade ore, milling..... 967
Lubrication, drill..... *13
Lubricator for Diesels.....*115
Lucky Jenny mill rebuilt.....n828
Lucky Jim..... 583
Lucky Tiger..... 230
Lundberg method of prospecting.....e643
In Canada .....n1023, n1024
Lure of mining.....letter 534
Lurie, C. N., on "lost" mines of Brazil.... 498
Lutze property under lease.....n742
Lydenburg Platinum areas ..... 829
Lyndenburg Platinum areas..... 829
Lynn Creek zinc mine leased .....n471

## M

MacIntosh flotation machine ....n393, n*874
Mabel, see West End Consol.
MacLeod Co. .....792, 911
MacKay ..... 231
MacKenzie, A. G., portrait.....*988
MacMillan, C. J., on F. W. C. Mfg. Co. ..letter 779, see also letter 662
MacPhee, R. G., on Metaline district..... n63
On lepidolite find in Washington.....n*468
Machinery, and labor, in tropics .....e322
Displaces labor in Malaya .....e243
Electrical, control of .....e243
Equipment, approved ..... 790
Service and its abuse .....e363
Mackie Fuel Co. vs. Dorchy, strike case..e722
Madison County, Mont., activity .....n540
Magazine explosion, Lake Denmark, N. J. e241, 367
Magazines, see Blasting.
Magma Copper, report .....197, 759
Fire .....n902
Magmas, see Geology.
Magna mill, see Utah Copper.
Magnesia, temperature control in production 430
Magnesite, Greek, in 1925..... 656
Calcining, multiple-hearth roaster for.. 930
Since 1900 ..... *10
Tariff .....n26, n627
Tariff, report ready.....n984
Magnesium, refining, patent..... 353
Magnetic separator, see Ore Dressing.
Magnetite, Prince of Wales Island to be worked .....n743
Use as iron ore ..... 14
Magnetometric prospecting, see Prospecting.
Maitland, A. G., to retire.....n*1032
Malaya, dredging for tin, view ..... *298
Tin in .....67, 224, e243, 712
Mechanicalization .....e243
Production ..... n67
Suction dredges fail ..... n67
Mammoth ..... 148
Man, ancient, in Nevada.....letter 103
Manchuria, lithographic stone ..... 100
Manganese—Brazil, independent producers suspend .....n505
European situation .....e601
Gold Coast mining .....n587
Harriman concession, first year....n427, see also e601, 679, n985
Concession not transferred.....n985
Idaho company producing.....n904
India ..... 254
Indian producers in agreement.....n948
Production increased in 1925 .....n147
Russian concessions ..679 see also 427, e601
Tchiatouri, Caucasus .....*964
West Australia operations.....n948
World's industry ..... 966
Manhattan, Nev., properties developed ....n150
Manitoba, Chamber of Mines formed .....n629
Mining, potential .....*887
Mining shows progress .....n1024
Properties refinanced ..... n29
Railway withdraws charter celebration n344
Manitoba & Ontario Mines incorporated..n864
Manitoba Gypsum to develop deposit .....n263
Mansfield, F. M., on Italian mining .....n266
Mansfield, G. R., on phosphate reserves..*810
Manzel Bros. Co. ..... 115
Mapimi, Mex., limestone deposits....*289, see also *246.
Mapping, topographic, Rocky Mountain states .....n551
Marble quarry, West Rutland, Vt., views *244, 245
Maria Josefa ..... 29
Market data book, 1926-1927 ..... 871
Market report, change suggested ..... 900
Marland oil men in Alberta .....n668
Marley spray nozzle .....*555
Marquette Range mines low-grade ore ....n347
Marshall, I. M., on drill lubrication ..... *13
Martin, G., on Combined Metals plant ...n*542
On Park Utah pumping plant .....n*422
On rope drive vs. belt drive .....*538
On Utah metal production .....n666
Martindale Elec. Co. ..... 912
Mary B. ..... 664
Masks, gas, see Safety.
Mason, F. H., on British Columbia activity.n*945
Mason Copper ..... 584
Mason Valley mines producing .....n*62
Mason Valley, "blows in" Thompson Smelter .....n262
Materials, raw, from abroad ..... 314
Demand for .....e921
"Mathematics for Engineers" ..... 675
Matte, converting, patent ..... 632
Mawchi mine backward.....n471
Report .....n1029
Maxville Gold, to have flotation plant ...n262
Mayflower ..... *68
Mayflower-Old Colony ..... 540
Mayo district, Yukon, shipments .....n466

Page
Mazatlan-Durango auto road .....n866
McBride, D. .....*269
McDonald, J. F. .....*549
McGraw, J. H., dinner to .....n*1030
McIntyre ..... 348
Discovery .....n861
Explores claim at Red Lake .....n189
Report ..... 230
McIntyre Porcupine ..... 467
Increases reserves .....n586
Reports .....197, 679
McKinley-Darragh-Savage may close .....n585
McLean-Gold loses grants case .....n231
McNeill, R. W., on electric power shovel..*764
Measuring pockets, shaft .....*222
Measuring volume of low-pressure air ....*257
Mechanical slaves and their masters.....e883
Mechanicalization of Malayan tin mines ...e243
Medal, Saunders ..... *12
Melrose, Mont., phosphate, bulletin on .. 675
Melting pots, new .....194, 555
Men of iron .....e561, n*581, n584
Mendenhall, W. C. .....*549
Criticized.....letter 382, see also e201
Mercury, see Quicksilver.
Mercury boiler ..... 702
Mesabi Range, two more shippers .....n104
Shipments largest in history.....n865
Metal miner, prosperity for .....e521
Metal prices.....*77, *277, 278, *279, *435, *636, *795, 900, *957
Metal producers, consolidation .....e881
Metal producers, leading .....1022
Metal production, eastern states, U. S. ...n828
Metal statistics .....37, 758
Metaline district, Wash., revival ..... n63
Metallography of steel and cast iron ..... 192
Metallurgists, noted, Lang, H. .....*204
Metallurgy—
Amalgamation:
Ancient ..... 53
At Homestake .....*564
Corduroy for recovering free gold.... 822
Process, patent ..... 952
Ancient and primitive .....48, 451, *649
Antimony ..... 702
Calculations, metallurgical .....*780
Chlorination:
Patent process ..... 632
Zinc sulphide, bromine in ..... 338
Control at Magna mill ..... 379
Converting, loss of copper and nickel ... 578
Cyanide process:
Concentration of solution values in evaporating pulp samples .....*1018
Fouling of solutions ..... 420
May be superseded by flotation, Australia .....n350
History .....letter 622, letter 1021
Patent process ..... 632
Precipitation, copper, patent ..... 114
Repulping box for filter cakes ....1019
Solubility of silica, etc. ..... 871
Elementary textbook ..... 871
Gold, decantation vs. filtration....letter 382
Hydrometallurgy and fire methods ..... e42
In northern Ontario ..... *94
Leaching:
Combined Metals plant.....n*542
Copper ..... 72
Copper, patent ..... 790
Gas-house liquor for zinc-lead ores...*855
"In place," at Delano .....n1025
Inspiration plant .....n663
Lead ore, "in place" ..... 702
Process, patent ..... 952
Progress .....n550
Research at Houghton .....n785
Solvents developed at Tucson .....n665
Valves, lead-lined ..... 615
Research, Carnegie Inst. to continue .... n70
Sintering:
Coke-burning stoves .....*412, letter 535
Development of machine ignition.letter 535, see also *412
Limestone ..... 430
Machine tested .....e723
Tapping machine, patent, for furnaces .. 353
Volatilization:
Dorman process.....letter 22
Patent .....353, 952
Zinc, patent ..... 952
Metals, imports and exports .....39, 239
Metals, production .....77, 795, 957
Metals and slags, granulation ..... 367
Meteorite, Canyon Diablo, existence doubted*817
Meter, electric, see Electric
Meter, flow, for gas analysis ..... 514
Meter, flow, improved .....n*592
Methods, mining, see Mining Methods.
Metric system, adoption or addition..letter 103
Mexican Premier, ships soon .....n*706
Mexico—Accidents must be reported .....n509
Activity in mining .....n668
Copper zone, new .....n509
Cuts tax on silver production .....n798
Damage claims due to revolution .....n588
Denouncements increase .....n105
Exports .....n866
Gold exports to be balanced by imports..n709
Investment in .....e121
Labor migrates to U. S. .....n106
Lead, production .....n907
Limestone replacement deposits ...*246, *289, e321
Mazatlan-Durango auto road .....n866
Mexico again .....e121
Metal production up .....n509, n997
*Mexican Magazine*..... 392
Mineral production, Jan.-June .....n588
Mines, active, listed .....n871
Mines, views .....*124
Mines renounce claims due to revolution .....n907
Mining progress in 1925 ..... 256

Page
Mexico—Continued
Mining law ..... 392
Bulletin on ..... 1033
Criticized .....n509
Modification asked .....n823
Not confiscatory ..... n26
Opposed .....n668
Mining stocks decline .....n823
Old mines, plans to rework .....n426
Our sister to the south .....e882
Prospect, a, in Mexico.....letter 940
Road construction aids geologists .....n588
Taxes .....n866
Silver, see Silver.
Ten mining zones proposed .....n588
Zacatecas revival .....*324
Zinc and lead from Tampico .....n145
Mexico Mines Supply Co. ..... 588
Miami, Ariz., view .....*849
Miami Copper Co., history, etc. .....*849
Miami-Joplin, see Joplin-Miami.
Mica, Australian mines developed .....n470
In India ..... 937
Mining and milling methods ..... 894
Michigan—Copper, see Copper.
Iron, see Iron and Steel
Mining industry at state fair .....n265
Taxation, assessment suit postponed ...n265
Mich. Col. of Mines—Allocation of time ..e323
Experiments .....n664
Faculty changes .....n30, *31
Research appropriation asked .....n824
Research work progresses .....n785
To change name .....n665
Triangulation system elaborate ..... n25
Mich. Engineering Soc., meeting .....n870
Michipicoten district, developments .....n1024
Micolithic Co. ..... 745
Microscopic features of Sullivan ore *375, letter 899
Mike Wilcox mine .....1024
Milburn, A. Co. ..... 833
Milford disaster .....e761
Miller-Daugherty case .....n625
Miller-Lake-O'Brien ..... 426
Millionaires, dwindling number .....e443
Mills—Ball, patent .....192, 632
Crusher, new type .....n828
Crushers, disk vs. roll ..... 738
Crushers, patent ....192, 273, 474, 632, 790
Crushers, gyratory, new, of record size.n*995
Crushers, gyratory, patent ....192, 474, 632
Crushing machinery, progress in ..... 694
Cubical grinding media .....e83, *95
Danish pebbles for .....n187
Grinding, patents ..... 353
Grinding efficiency and flotation ..... 331
Grinding, patent ..... 712
Removal of colloids, patent ..... 273
Lime circuit, Magna mill .....223, 898
Low-grade ore, milling..... 967
Machinery, patent ..... 952
Magna, repair and maintenance .....*609
Mica milling, methods ..... 894
Methods at Sullivan mine .....n*749
Novel plant, view .....*499
Practice at Homestake .....*564
Rod, patent ..... 192
Sites and mineral rights ..... 420
Small, for base ores .....n555
Symbols for flow sheets.....*608, letter 778
Tube, hauled to mill .....*568
Minas Geraes, iron and steel manufacture..n387
Mine administration, Arizona course n112, e122
Mine cars, patent.....114, 192, 353
Mine dewatering diagram .....*775
Mine financing .....e481
Mine inspection, state or county...n827, n908
Mine model, steel frame for ..... *54
Mine owner, absentee .....e242
Mine promotion, see Promotion.
Mine rescue .....e561, n*581
And first aid .....e283, n*428, *484
Meeting, views .....*484
Mine Safety Appliance Co. ..... 155
Mine support discussed .....n711
Mine timbers, treating to be studied .....n473
Timbered raises, driving .....*299
Timbering job, a ..... 93
Wood preservation .....871, 1033
Mineral collection, Canfield, for Smithsonian .....n747
Mineral industry, book on ..... 591
Mineral production, U. S., will break record n705
Mineral Range may abandon tracks .....n423
Mineral resources .....72, 591, 1033
Mineral specimens ..... 420
Mineral statistics from two bureaus .....n264
Mineralization stoping, formation of ore-bodies ..... 430
Minerals, future demand for .....n550
Mines, freight from .....n663
Nationalization .....e843, n828
Situation at, see Situation at Mines.
Mines Bureau, see Bureau of Mines.
Mining—Administration, graduate school. n112, e122
Ancient and primitive .....451, *649
Ancient, and ancient metallurgy ..... 48
And Forest Reserve .....n552
As a business .....e522
Automotive transportation .....e203
Centers, passing of .....e281
Companies' statistics .....n358
Costs, see Costs.
Engineers, see Engineers.
Expansion ..... e41
Importance urged .....n946
Lawyer's and doctor's view of....letter 1021, see also e763, 900
Lure of .....letter 534
Methods, see Mining Methods (below).
Prosperity .....e241, e521
Quarter century of progress ..... *5
Reports ..... e3
State aid for miner .....e123

*Illustrated; e, editorial; n, news

Page

Mining—Continued
Success in .....e763, letters 900, 1021
Trend, present .....e163
White man's burden .....e641
Without ore.....e81, letter 101
Mining Methods (see also Shaft Sinking, Hoisting, etc.) ....57, 141, 222, 299, 378, *460, 619, *739, *775, *938, *1018
Ancient and primitive ..... 451
At Britannia .....*924
At Sullivan mine .....n*749
Automotive transportation .....e203
Butte district ..... 513
Deepening Pilares shaft .....*569
Driving timbered raises, Butte .....*299
Dump doors in winze sinking .....*141
Ground classification .....*368, *413
In tropics ..... 373
Junction of shafts ..... *55
Mica mining and milling ..... 894
Narrow stopes and bigger profits .....e442
Nickel, at Creighton mine ..... 72
Open pit practice at United Verde ..... 192
Portland mine ..... 513
Progress since 1900 ..... *5
Shaft-measuring pockets, new .....*222
Stoping, retreating-bench, proposed ....*255
Mining & Metallurgical Society, awards medal to Jackling .....n*748
New York Section, meeting .....n674
Mining Corp., adds to holdings .....n229
Develops magnetite .....n423
Report ..... 158
"Mining Educator," book review ..... 474
Mining speculation .....e482
Minorities, organized.....e81, letter 341
Misfires, see Blasting
Mississippi silver mine .....e642
Missouri, southeast, ore-magmatic district..*968
Mistake, another, corrected .....e882
Moctezuma Copper, deepening shaft .....*569
Safety-first celebration .....n866
Modderfontein ventilation ..... 513
Model of mine, steel frame for ..... *54
Model, working, of skip dump .....*739
Mogollon merger proposed .....n386
Mohawk ..... 388
Averages 26 lb. copper per ton .....n824
Regrinding equipment complete .....n265
Production at peak.....n983
Molybdenite, Northland opens vein..... n25
Molybdenum, bulletin, Canadian, on ..... 591
In 1924 ..... 114
Monarch and Boise Rochester consolidated n540
Monazite sand, U. S. is low-grade .....n424
Mond Nickel, doubles sulphuric acid plant.n986
Mondell, F. W., speaks on public lands...n987
Monel turnings separated from iron and steel ..... 100
Mono .....231, 625
Completes Silveretta mill .....n*385
Mont de Lion, alleged "salting" case .....n588
Montana, metals in 1924 ..... 114
Earthquake, paper on .....1033
Labor unions dissatisfied .....n904
Minerals in 1925 ..... 615
Notes from.....n540, 746
Small mines busy .....n981
Montana section, A.I.M.E., meetings..n191, n511
Montana Soc. of Engineers, meeting .....n711
Montana-Idaho ..... 387
Montbray, Ont., another strike .....n784
Montcalm claims under option .....n385
Monte Cristo bought by Julian ..n541, e803
To have power line.....n983
Moorcroft reef, gold .....n669
Moore, G. W., ore hauling, Joplin-Miami..n*308
Moore, J. I., Jr., on Britannia.....*924
Moore, Dr. R. B., goes to Purdue .....n*512
Moore cuts faulted oreshoot .....n386
Assessment .....n865
Morenci, see Phelps Dodge.
Morgan, F. S. Co. ..... 194
Morgan, S. on prospecting.....letter 779, see also 601
Morning, productive after 40 years.....n903
Morrison, F. A., on California blue-sky law....letter 463, see also e282
Mosqueteros may be sold to Shannon ...n1025
Mosquito engineer .....e843
Mosquito Gulch tunneled.....n947
Moss, C. O., on steel frame for mine model ..... *54
Mother Lode chapter, A.M.C., election .... n30
Mother Lode mining .....*456
Motion pictures, entertain engineers .....n511
Michigan copper mining .....n145, n*265
"Story of Copper" .....n145, 350, n863
Motor bus, aluminum in .....e323
Motor transportation and mining .....e203
Motor truck, new use for .....n155
"Motor-It" speed reducer .....*154
Motors, direct-current .....n431
Protection, complete .....n*753
Starting equipment .....n*233
Mount Elbert Dredging Co. ..... 422
Mount Hope mine damaged by explosion..n107
Mount Isa Mines, Ltd. ..... 907
Mount Lyell, report .....1035
Mount Morgan, report ..... 359
Mountain Consol., heroism rewarded .....n539
Mountain Meadow ..... 585
Ships .....n863
M'Tuga ..... 587
May be optioned by Falcon .....n510
Multiple eccentric motion by new device..n*676
"Mycalex," insulating material ..... 714

## N

Nacozari, see Phelps Dodge.
Naething, F. S., on Okla.-Kan.-Mo. zinc-lead .....*604
Name, what's in? .....e1003
Narrow Lake, Ont., gold find .....n306
Nat'l Research Council seeks aid .....n711
Nat'l Safety Council meeting.n791 (see also Safety)
National wealth and income ..... 871
Native steam as mineral commodity.....e962
Nationalization of mines.....e843, n828
Natural gas, see Petroleum.
Neihart, Mont., active .....n585
Nelson, W. A. .....*711
Nevada, ancient man in.....letter 103
Bullion tax appeal lost .....n539
Gold, etc., bulletin on .....1033
Nevada Consol. buys ore from Consol. Coppermines .....n107
Financial statement .....n875
Orders large hoist .....n432
Power line, new, for Ray .....n785
Nevada Douglass, financing ..... 706
Nevada-Pacific Minerals Co., organized...n825
New Alto ..... 65
New Brunswick, copper find ..... n64
New Candelaria, new orebody .....n*345
New Comstock reorganized .....n543
New Cornelia doing well .....n226
Finds new ore .....n107
Has carbonate ore supply .....n864
New Guinea, gold rush .....n311, n709
Report on Edie Creek gold field .....n828
New Jersey Zinc, options property in Chloride district .....n468
Denied .....n505
Reports .....318, 759
New Mexico, claim jumping a misdemeanor e402
Mining and other industries.....letter 535
Potash found .....n826
Southeastern, geology ..... 675
Wants miners .....n588
New Modderfontein reserves .....n545
Meeting .....n986
New Pretoria Silver Lead finds tin .....n629
New South Wales, mineralogy ..... 675
Mining reports ..... 712
New York Zinc bought by St. Joseph Lead n425
New Zealand, notes from .....n311
Newlife Mining & Milling Co. .....n308
Nichols Copper, shares sold .....n226
Nickel—Canadian production grows .....n150
British Amer. Nickel to reopen plant ..n1024
Cobalt-nickel separation, patent ..... 392
Converting, loss in ..... 578
Currency for Argentina .....n707
Extraction, patent ..... 192
In 1924 ..... 114
In world commerce, German paper on .. 392
Industry on stable basis .....n508
Lokris Co. registered .....n310
Malleable, patent ..... 273
Mining at Creighton mine ..... 72
Prices ....436, *437, 638, *797, 958, *959
Recovery, patent ..... 192
Swedish refining patent bought by Internat'l .....n387
Nickel-copper, Sudbury, geology of, book on 632
Nicol, J. M., on magmas and ore magmas letter 778
Nipissing .....*724, see also *684
Report .....n667
Stocks gain .....n1023
Nipissing Ry., right to build upheld .....n388
Nishihara, H., on lithographic stone in Manchuria ..... 100
Nitrate—Chilean ...182, e242, 264, 471, 660, 675, 712
Depressed .....n471, n947
Genesis of.....letters 182, 660
Producers' problem .....e242, n264
Prices .....e242, n264
"No par-value" stock ..... 392
Noise, making industry noiseless .....e803
Nome, gold dredging .....n*626
Noranda .....*724
Horne .....*684, *724
Developments .....n145
Hoist ..... 896
Lays out townsite .....n505
Options claims ..... n29
Options claims at Lake Savant.....n986
Shares advance, new ore reported .....n903
Smelter construction progresses .....n1026
Smelter costs .....n465
Stocks gain .....n1023
Nordberg Mfg. Co. ..... 306
North Butte, and Granite Mountain .....n187
Development .....n828
Leasers make shipments .....n665
New shaft .....n942
Shipments .....n422
North Carolina gold mines to be worked ..n586
Mineral production .....n825
North Carolina Univ., new geology building .....n710
North Star ..... 824
All-steel mill for Idaho group..... n65
Northern Belle Extension near shipment ..n*746
Northern Blower Co. ..... 953
Northern Explosives in combine.....n984
Northern Peru M. & S. Co. ..... 24
Northland operations .....n25, 861
Northwest engineers to meet .....n511
Northwest Magnesite Co. ..... 430
Northwest Mining Assn., meeting.....n949
Norway, aluminum industry.....n954
Fluorspar threatens competition.....n983
Noscut raises funds .....n423
Noted engineers, see Engineers.
Notman, A., on American prosperity .....*772
Nourse, C. F., sues in alleged "salting" case n588
Nova Scotia gold ..... 675
Claims must be worked .....n864
Shale ..... 871
Nozzle throws whirling spray .....*555

## O

O'Brien buys land .....n586
Obituaries:
Alexander, W. H., 909; Ballard, C., 512; Barker, R. F., 909; Bethune, W., 713; Bibb, A. C.,713; Boney, C., 751; Bottomley, Col. H. H., 751; Brown, W. H., 71; Butler, J., 589.
Chambless, T., 713; Chapin, W. C., 313; Covallier, C., 31.
Dahl, S. K., 993; Del Mar, A., 113; Dodge, C. R., 31; Dunlop, B., 631.
Edwards, W. S. ..... 993
Fairweather, J., 831; Friberger, H. L., 631.
Gell, P. L., 153; Greeson, A. B., 831; Greve H., 429; Griffiths, E. W., 589.
Hawkins, E. S., 950; Hawthornthwaite, J. H., 789; Heinz, N. L., 113; Herbert, G. T., 31; Herzig, C. S., 909; Hewett, M. L., 475, 713; Hoatson, J., 713; Hood, W., *429; Hylands, J., 993.
Jaeger, B., 993; Jamieson, W., 31; Judge, A. T., 589.
Karri-Davis, W., 950; Kemp, J. F., *872, e883; Knowlton, Dr. F. H., 909.
Lemieux, E. C., 153; Lilley, S. I., 232.
Madden, J., Sr., 831; McArthur, C. W., 909; McCombie, J., 831; McCool, E. J., 831; McDowall, W. A., 153; McIntyre, W. H., 429; Mentz, D. J., 993; Merriman, J. K., 475; Merritt, A., 789; Morrison, W. L., 269; Morse, C., 71; Murray, J. C., 589; Myers, J., 670.
Nearne, H. A., 589; Neustaedter, A., 313; Nolan, E. D., 512.
Oglebay, E. W., 31.
Paine, C. J., 269; Pels, S., 351; Penhale, Col. J. J., 429; Peters, F. C., 113; Phillips, B. D., 909; Pistorius, H. F. E., 589.
Reed, S. E., 554; Rhodes, F. B. F., 589; Ronan, M., 113; Ross, A. S., 909.
Saunders, Prof. E. J., 831; Sheehan, C., 751; Smith, C. B., 269; Spaulding, W. J., 909; Squier, S. C., 831; St. Clair, G. A., 113; Sweeney, L. F., 993.
Timmins, Capt. W., 153; Trenholm, H. R., 153; Tuff, F., 713.
Uglow, Dr. W. L., 313.
Wallers, W. F., 113; Weber, J. L., 751; Wilkinson, G., 390; Woods, H. H., 71; Woods, J. M., 993.
Youle, W. E., 713; Young, G. U., 950.
Objective, use of a.....e241, letter 260
Ocean rates, copper and lead.....n997
Ocean water for flotation .....n629
Oddie, Senator, for Mine Bureau appropriation .....n906
Bill to aid geophysical prospecting ....n1026
Portrait .....*992
Ohio Brass Co. .....476, 753
Ohio Injector Co. ..... 274
Oil, see Petroleum.
Oil burner, new ..... 476
Oil shale, see Petroleum, Shale oil.
Oiling, drill ..... *13
Ojuela, Mex., limestone deposits....*289, see also *246
Ojuela starts mill .....n741
View .....*124
Oklahoma cannot tax Indian land ore .....n742
Publications ..... 832
Old mines, passing of .....e403
Old Dominion ..... 27
History, etc. ..... 851
Old Timer, on sunburnt miners.....letter 342
Oliver .....540, 862, 902
Awards prizes for gardens .....n711
Godfrey, new mine .....n865
Mines electrified .....n*384
One-man mine, a .....n588
Oneal, E. H., and C. T. Todd, on measuring volume of low-pressure air .....*257
Ontario—American holdings decline .....n707
Copper, interest in.....n986
Copper find .....n585
Discoveries, recent .....n861
Eastern, silver-lead ore in .....n629
Gold production .....n348, 505, 544
Increases .....n902
Liquor policy, to be voted on .....n707
Mineral production, Jan.-June, 1926 .... 591
Ore production and smelting, Jan.-June n470
Northern, electric expansion .....n190
Metallurgy in ..... *94
Power, ample, for mines .....n908
Right to build railway upheld .....n388
Silver, costs lower .....n745
Silver production, Jan.-June .....n470
Ontario Mining Ass'n, election ..... n70
Onverwacht Platinum, ore milled .....n510
Meeting .....n986
Only producer so far .....n863
Production .....n867
Registered ..... n68
Report .....n1029
Onyx find in Arizona .....n786
Opalite quicksilver mine to have furnace .. n27
Open pit practice at United Verde ..... 192
Ore—Cavities through mineralization stoping e321
Copper, estimation in mines .....*531
Deposition .....e762
Low-grade, milling ..... 967
Magmas and veins, see Geology.
Microscopic features of Sullivan ore ...*375
Reserves, and freight rates ..... e82
(See also Geology)
Ore Dressing:
Classifiers and Classification:
Adjustable, drag-type.....letter 342
Classifiers, patent .....353, *952
Colloid removal, patent ..... 273
Concentration:
Concentrator, dry, patent ..... 790
Concentrator, patent ..... 474

*Illustrated; e, editorial; n, news

Page
Ore Dressing—Concentration (Continued)
Flue dust ... 430
Gold, patent ... 353
Lead-silver, at Hecla ... *444
Lead-silver, problem in ... *815
Lead-zinc, balancing metallurgical sheets ... letter 22
Low-pressure air, measuring volume .. *257
Table, patent ... 474
United Verde's new concentrator ... *976
Ore Dressing:
Copper, patent ... 474
Filtration:
Repulping box for filter cakes ... 1019
Flotation:
At Homestake ... *564
Bibliography, books, articles and patents ... 535
Book on flotation wanted ... e283
Combined Metals plant ... n*542
Differential, significance of ... e82
Gold ... 871
Gold, Kalgoorlie ... 20
Gold, patent process ... 952
Gold ores, pyritic, of Rand ... *165, *215
Grinding efficiency and flotation ... 331
Improvements affect smelting methods e522
Lead carbonate ... 1033
Low-pressure air, measuring volume .. *257
MacIntosh machine ... n393, n*874
Machines, patent ... 114, 474, 632, 952
May succeed cyanidation, Australia .. n350
Mills, small, for base ores ... n555
Ocean water used ... n629
Papers on ... 192
Processes, patent ... 353, 952
Pyrite as waste product ... 14
Pyritic gold ores, Rand ... 175
Reagents, patent ... 353
Reagents used in 1925 ... n868
Selective ... n551
Selective, at Parral ... *644
Selective, of sulphide ores ... 392
Selective or differential ... letter 181
Symbols in flow sheets ... *608, letter 778
United Verde's new concentrator ... *976
Separation:
Agitator, sizing, patent ... 353
Cobalt-nickel, patent ... 392
Gravity separation, patent ... 790
Hafnium-zirconium, patent ... 273
Magnetic separator ... 72
Pneumatic, patent ... 353
Separator, centrifugal, patent ... 790
Separator, electric, patent ... 790
Vanadium, patent ... 392
Stratification in ore dressing ... n673
Text book, review ... 591
Ore finding ... 551
Ore recovery, paint helps in ... n629
Ore samplers, electric-timing device ... *938
Ore schedules, lead-zinc ... 822
Ore transfer gate ... *538
Orebodies, development of, book review ... 790
Oregon, southwestern, gold mines ... n948
Ores and metals, exports and imports, see Foreign Trade.
Organized minorities ... e81, letter 341
Orientation, underground, Weiss ... letter 820
Ormond, O. O., on side-arm collector ... *142
Orogrande, gold telluride at ... n948
Osage oil leases at auction ... n386
Osgood Co. ... 714
Buys Fairbanks Steam Shovel Co. ... n74
Osmiridium, state aid for miner ... e123
Oster Mfg. Co. ... 792
Otisco ... 543, 981
To be opened ... n263
Ownership, Government ... e843, n828
Oxy-acetylene generator, safe ... n315
Oxy-illuminating gas ... letter 304, see also July 17 issue, front cover
Oxygen, use discussed in San Francisco ... n511
Oxygen, liquid, see Blasting.

## P

Pabst, G., mine, cave-in, rescue, etc. . n539, e561, n*581, n584, n*665, e761, n*781, letter 859, n908
Page mine, new mill for ... n383
Pahang Consol., meeting ... n1029
Paint helps in ore recovery ... n629
Palisades, new mill ... n*865
Palladium, estimation ... 72
Palms-Book iron worked by Ford ... n345
Pan conveyor, beaded, scraper for ... *776
Pan-European Congress ... e603
Panama, concessions ... e41
Gold areas ... n*1027
Panama Corp., Ltd. ... e41
Paradise mine bonded ... n544
Developed ... n982
Park Bingham, storage battery eliminates horse haulage ... n1026
Park Utah, pumping plant ... n*422
Park Utah Consol. ... 307, 786
Report ... 639
Parker, L. T., on mine owner's liability ... 773
Parral, selective flotation at ... *644
Parsons, A. B.—On current statistics . . 796, *797
On meeting, New York Sec., M. & M. Soc. ... n674
On Rouyn ... *684, *724
On selective flotation at Parral ... *644
On Zacatecas revival ... *324
Review of current statistics . . *78, *79, n637
Review of "Today and Tomorrow" ... 474
Passing of mining centers and mines e281, e403
Patents ... 114, 162, 273, 353, 392, 474, 632, 712, 790, 952
Flotation, list ... 536
Publication an aid ... e721
Patricia District, see Red Lake.
Paymaster, assessment ... n746
Crown grants valid ... n231
Plans treatment at Porcupine ... n189
Payne, H. M., meeting ... 990
Pearce-Low assaying method, see Tin.
Pebbles, see Mills.
Pecos mine, new lead-zinc project ... *1004
Peep-hole door for furnaces ... n*633
Pennsylvania geology ... 1033
Peñoles ... 324
Claims for revolutionary damages ... n588
Limestone replacement deposits ... *246, *289, e321
News from ... n823
Ojuela starts mill ... n741
Penrose mines, activity ... n743
Drainage project ... n863
Persia, booklet on ... 712
Bulletin on ... 192
Petroleum—Albania, petroleum in ... *404
Alberta fields to be explored ... n668
Amer. Petroleum Inst., meeting ... n869
And statesmen ... e43
Bulletin on ... 1033
California production ... n997
Canada, output doubled ... 886
Capital invested in Canada ... 937
Conservation ... e43, e401, e443
Conservation, report on ... e443
Consolidation of companies ... n867
Development, essentials for ... *571
Engineers meet ... n711
From coal ... e841
Gas, natural, Canada tries to prevent waste ... n265
Geologists, see Amer. Ass'n of Petroleum Geologists.
Geology, book on ... 951
German institute ... n870
Illinois ... 392, 952
No famine ... letter 579
Operator, small, plea for ... n553
Osage leases at auction ... n386
Output equals 1925 ... e882
Too rapid ... e123
Papers at Western congress ... n552
Patents ... 192
Pipe-line statistics ... n825
Puente Hills, Calif., geology ... 114, 632
Recovery, forced ... e803
Research ... e83
Rumanian, in 1925 ... 618
Saskatchewan, first well ... n669
Shale oil:
Adventure in ... 1031
Catlin Co. to make test run ... n465
Future discussed ... n674
Geology, book on ... 951
Government plant running ... n551, n584
Industry ... n710, *1013
Nova Scotia ... 871
Since 1900 ... *5
South Africa, see South Africa.
Synthetic ... e923
Under reamer, patent ... 192
Utah, first gusher controlled ... n23
Venezuela, production increases ... n984
Western Australia ... 430
Wyoming ... 675
Petrology, Pirsson's, revised ... 391
Phelps Dodge:
Copper Queen:
New department ... n346
Smelter output at Douglas makes record ... n985
Morenci, entertainment ... n706
Nacozari, cubical grinding media . . e83, *95
Uses diamond drills ... n349
Options Bonney mine ... 582
Plans improvements ... n784
Safety work ... n*227, n866
Sued by Carson ... n383
Phosphate—Florida ... 72
Melrose, Mont. ... 675
North African production ... n509
Production, 1925 ... 93
Reserves ample for 2,000 years ... *810
Sought by Consolidated Mining ... n305
Treatment, patent ... 192
Tunisia, production declines ... n266
World situation ... 980
Physical examination in industry ... 871
Physician's view on mining . . e763, see also 900, 1021.
Pickands, Mather & Co. ... 902
Pickering, J. C., on manganese at Tchiatouri ... *964
Piedmont Products Co. ... 894
Pig iron, see Iron and Steel.
Pilares shaft, deepening ... *569
Pin-wheel theory for Joplin ... e2
Pioneer district, Nev., active ... n*68
Pioneer Mining Corp. ... 708, 1024
Poneer Syn. ... 470, 744
Pipe-line statistics ... n825
Pirsson, L., petrology revised ... 391
Pittman act, see Silver.
Pittsburgh district, guidebook to ... 1033
Placer mining, riffle box, patent ... 474
With steam shovel ... n427
Plata Mines ... 147
Plating, chromium, by General Motors ... 47
Platinum—Colombian placers, equipment . . *339
"Crude" ... 119
Iridium and iridio-platinum ... 901
No glut yet ... e402
Prices ... 758
Returns disappointing ... n427
Russia, returns ... n427
Shares rise ... n669
South Africa, see South Africa.
Wyoming ... 675
Pleasant Creek claims sold ... n65
Plumb bob, patent ... 114
Plutocrat, find ... n945
Plutus, and report ... 148, 260
Plymouth finds oreshoot ... n587
Pockets, shaft-measuring, new ... *222
Poland, agreement on Giesche concession . . n63
Zinc industry ... n63, n584
Polar sea water, gold in ... 1017
Politics in mining game ... letter 181
Porcupine (district), treats low-grade ore . n628
Gold camp ... e722
Porcupine Goldfields, leases Lynn Creek zinc mine ... n471
Porcupine Paymaster, townsite for ... n583
Port Arthur, Ont., has assay office ... n107
Port Kembla, handling coal ... 1012
Porter-Idaho ... 704
Portland Canal Short Line Ry. ... 387
Portland cement, see Cement.
Portland mine, methods ... 513
Article on, noted ... 1033
Portraits, oil, protest against ... e562
Pots, new, for melting metals ... 194, 555
Potash—Combine raises prices ... n110
Development, organization for ... n424
Exploration, delayed ... n742
Meets obstacles ... n584
Site selected ... n667
Finds in Western states ... n826
German production standardized ... n510
In Texas and New Mexico ... 675
Investigated by Sellards ... n541
Investigation in 1924 ... 114
Legislation ... n826
"Potash, a Review, Estimate and Forecast" ... 430
Prospecting in U. S. ... e161
Russian deposits large ... n471
Studied by Bureau of Mines ... n345
Texas ... e521
Advice sought ... n667
Investigated ... n384
Site, fourth, to be explored ... n947
U. S. Government to assist industry ... n66
Utah deposits to be drilled ... n424
Potassium, extraction, patent ... 192
Potgietersrust Platinum, report ... n469
Potrerillos, miners, strike ... n743
Powder, see Blasting.
Powdered coal, see Coal.
Power—Generator, most powerful ... e242
Future sources ... e841
Plant boilers, work harder ... 254
Reducer, worm gear ... *354
Regulation, automatic ... 774
Show ... n473, n710, n910
Steam, native ... e962
Variable-speed transmission ... n*514
Power hammer, new ... n*233
Power Plant Equipment Co. ... 555
Prather, H. P., on Manitoba mining ... *887
Precipitation, see Metallurgy, Cyanidation.
Precipitation, fume, see Smoke.
Premier zinc mine sold ... n106
Premier Gold, dividend ... n544
Premier Paymaster, grants held valid ... n231
Increased production ... n*466
Prescott, B., on limestone replacement, Mexico ... *246, *289, e321
Presidio ... 25
Price control, beneficent ... e403
Price level to last till 1930 ... n954
Prices, curves, metal ... *77, 277, 435, 636, 795, *957, 958, *959
Review ... *436, 437
Review of current statistics ... 278, *279
Prince of Wales Island, magnetite ... n743
Princeton Univ., seeks funds ... n710
Summer school completes tour ... n473
Producers of metals, consolidation ... e881
Leading ... 1022
Production and independence ... e242
Professors, rating by students ... e201
Profit sharing and executives ... e562
Profits, South African leasing ... 288
Progress of science ... e483
Promoters and Promotion—Emotionalism in mining investment ... e523
Financing, mine ... e481
Julian, C. C., and Julian Merger Mines . . e803
Mine promotion and financing ... letter 102
Rice, G. G. ... e602
Prospecting—Airplane, for copper ... *576
Assessment work, more time in Quebec . . n467
Canada aids prospectors ... n387
Capital scarce for mining ... letter 1[illegible]0
Carroll, "Bodie," analyzes prospecting . . n934
Claim holders should work ... letter 534, see also 303
Copper, by airplane ... *576
Dip needle, for copper ... n588
Earth-wave travel method ... *931
Electric ... 114
Electric, in Canada ... n1023, n1024
Prevents waste ... n673
Electric, is not magnetic ... e643
Geological aid ... e361
Geophysical, see Prospecting, Electric and Prospecting, Magnetometric.
Geophysical, German book on ... 192, 513
Bill to aid, Senator Oddie's ... n1026
Grubstakes ... 144
Handbook ... 832
In Belgian Congo ... 871
"Location of Mineral Fields," book on . . 799
Lundberg method ... e643
Magnetic (magnetometric) measurements in ore discovery ... letter *59
Magnetic prospecting not electric ... e643
Magnetometric ... letter *59
Waite-Montgomery uses method ... n348
Mining, success in ... e763, letter 900
New Mexico ... letter 535
Old breed not dead yet ... letter 859
Potash, in U. S. ... e161
Prospector, the ... e601
Public land discussed at convention ... n546
Sitting on top of the world . . 601, letter 779
"Sunburnt miners" ... letter 342
Tragedy over mining claims ... n347
Views on ... letter 303, see also 534

*Illustrated; e, editorial; n, news

Page
Prosperity, American ....*772
For metal miner ....e521
Trend of ....e683
Public hearing, belated notice .... e83
Public lands ....n191, n551
Mondell speaks on ....n987
Discussed at convention ....n*546
Public roads and assessment work ..e801, letter 941
Publication an aid to inventors ....e721
Publications, technical, see Technical Publications.
Publicity, policies, in mining .... e81
Value of ....e723
Puente Hills, Calif., oil geology ....114, 632
Pulaski, Va., to have steel mill .... n64
Puller, "Handy-Andy" ....n*154
Pulley, roll fly wheel, repair ....*740
Pulley, slippery, lagging of....*938
Pulverized coal, see Coal.
"Pulverzone," ....*431
Pumps—Deep well .... 715
Electric, problem solved at Calumet, Mich. ....n985
Mine dewatering diagram ....*775
Plant, Park Utah ....n*422
Space requirements .... *53
Valve, stream-line ....n*154
Worm-driven, needs no lubricant ....n*432
Pyrite, floating as waste product .... 14
Grasselli acquires mine ....n311
Pyrites roasting, mechanics .... 738
Pyritic gold, Kalgoorlie, flotation .... 20
Pyro-porus filter ....*115
Pyrometer controller, new ....n*476
Pyrometric terms defined.... 975

## Q

Quapaw Indians sue for ore proceeds....n583
Quarry, marble, West Rutland, Vt., views, *244, 245
Quartz, Canada production up....n586
Quartz Mountain, Nev., ore at....n187
Que-Que, gold find....n1029
Quebec, assessment work, more time for..n467
Copper zone extension....n745
Mining operations, 1925.... 591
Mining stocks gain....n1023
Queensland, mining report.... 712
Government mine ownership fails.n828, e843
Quicksilver, Almaden operated more than 2,000 years ....n469
Opalite mine to have furnace.... n27
Prices .... 758
Situation .... e1
Spanish production greater.... 498
Transmutation into gold ....e3, letter 181
Western mines increase production....n67
Yellow Pine, Idaho .... 675
Quincy ....27, 306, 743
Air blast entombs miner....n231
Improvement ....n1026
Mine photographed for "Story of Copper" ....n*265
New equipment ....n865
Silver from ....n109
Quinte Gold resumes....n708

## R

Radioactive springs ....e882
Radium, Australian operations....n709
In 1924 .... 114
Therapeutic properties ....n667
Mines, Belgian ....n188
Railroad rates, see Freight Rates.
Raises, timbered, driving at Butte....*299
Rambler mine, Wyo., zinc find....n824
Rand, see South Africa.
Rand Mines, Ltd., meeting....n109
Rand Selection refinanced....n587
Randsburg, Cal., activity....n267
Rare metals .... 114
Rare Ores Co. finds vanadium .... 308
Rates, railroad, see Freight Rates.
Raw materials from abroad, book review.. 314
Raw materials, demand for ....e921
Ray Consol., report .... 38
Raymond, W. W., on use of chinaman chutes ....*460
Reagents, flotation, see Ore Dressing.
Real del Monte y Pachuca, view....*124
Receiving box for time cards....*461
Red Lake—Assessment work rushed....n225
Claims recorded, 5,500.... n64
Clearwater Lake attracts prospectors...n745
Companies active ....n187
Dome, development .... n28
To install equipment....n107
Geology .... 17
History, etc. .... *15
Howey Gold to develop property....n541
Mapped ....n706
McIntyre explores claim....n189
Woman Lake, claims recorded.... n64
Exploration ....n147
Free gold found.... n25
Timmins option ....n189
Red Top .... 541
Finds lead-zinc ore....n1025
Reports bonanza ore....n825
Redfield, A. H., on petroleum in Albania..*404
Redfield, W. C., "Dependent America".... 314
Reducing furnace, patent.... 273
Reductio ad absurdum....e762
Reed, D. F., on sampling concentrates in bins ....*378
Reed Flat .... 467
Refining, at Federal smelter.... 366
Electrolytic, patents.... 952
Lead, patent .... 353
Magnesium, patent .... 353
Refractories, see Smelting, Furnaces.
Refractories Inst., see Amer. Refractories Inst.
Refrigeration, electric, requires much copper ....n424
Regulation, power, automatic.... 774
Reindeer industry grows in Alaska....n705
Relays, new-type ....n*431, 912
Relocation of claims in Alaska.... 702
Removal of colloids, patent.... 273
Renison Bell tin field, New Zealand....n828
Reorganized Pioneer Mines.... *68
Reports, mining .... e3
More informative ....e402
Repulping box for filter cakes....1019
Rescue, mine, see Mine Rescue.
Research, metallurgical, Carnegie to continue .... n70
Houghton asks appropriation....n824
Petroleum .... e83
Progress at Houghton....n785
Stressed at Michigan convention....n870
Reserves, ore, and freight rates.... e82
Resources, mineral .... 72
Retorts, zinc, apparatus for charging.... 420
Retreating-bench stoping, proposed....*255
Revenue act revision ....n913
Reverberatories, see Smelting.
Rhodesia, see South Africa.
Rhodesian & Gen. Asbestos Corp.... 747
Rhodesia Broken Hill, report....n267
Rhodesian Congo, airplane mapping ..n389, 829
Rhodesian Congo Border Concession ...389, 829
Rhodesia Minerals Concessions Co.... 311
Rice, C. T., on rocking the copper boat, letter 462, with editorial comment; see also e121
Rice, G. G., and Idaho Copper Corp....e602
What's in a name?....e1003
Richfield promising ....n388
Rickard, T. A., on ancient mining and metallurgy ....48, 451, *649
Lectures at Columbia Univ....n749, n*831
Rico, Colo., new flotation plant.... n27
Rico Argentine doing well....n947
Riddell, G. C., on oil-shale industry....*1013
Riffle box, patent .... 474
Riffle, sluice box, new.... 194
Ripley, W. Z., on company reports....e402
Roads, public, and assessment work ..e801, letter 941
Roasting, see Smelting.
Robb-Dean bought by Pioneer....n744
Robb-Montbray, another strike....n784
Roberts & Schaefer buy Car-Dumper Co...n194
Robie, E. H., on milling at Homestake...*564
Review of "Corrosion".... 712
Review of current statistics...278, *279, 436, *437, 958, *959
Review of "Text Book of Ore Dressing". 591
Robinson Gold, liquidation.... n28
Rock characteristics in mining....*368, *413
Rock drills, see Drills.
Rock slips ....*413, see also *368
Rocking the copper boat....e121
Rocks and rock minerals, book review... 391
Rod mills, see Mills.
Roll pulley, repair ....*740
Roll shell heating device....*461
Roller-Smith Co. ....752, 912
Rope, hoisting, see Hoisting.
Rope drive vs. belt drive....*538
Ropes, L. S., on selective or differential flotation ....letter 181
On microscopic features of Sullivan ore ....letter 899, see also *375
Rosario, Mex., strike of miners....n151
Rose, E. H., on cubes as grinding media, e83, *95
On grinding and flotation.... 331
On tailings at Llallaga....letter 144
Rosiclare vein ....*731, see also *695
Safety-first contest ....n942
Roth, J. S., in Bureau of Mines....n584
Roumania, see Rumania.
Rouyn—Developments ....n145
Copper find ....n946
Diamond drilling at ....n628
Excursion into....*684, *724
First trains to....n706
Map issued ....1033
Railway construction....n267, 310, 465, 467, 668
Railway's right to build upheld....n388
Royal Dev. Co., lepidolite find....n*468
Royal Silvers .... 983
Rubber, price....n310
Rubenfeld, Dr. J., on German metal markets 159
Rubidge, F. T., on retreating-bench stoping*255
Rumania, petroleum in 1925.... 618
Russell, J. E., on a lawyer's view of mining....letter 900, see also e763, 1021
Russia—Concessionaires regret action....n267
Bauxite ....n948
Concessions ....e321
Dictatorship of the engineer....e603
Manganese concessions..n427, e601, 679, 985
Manganese mining at Tchiatouri....*964
No property return....n747
Platinum, returns....n427
Potash deposits large....n471
Retains Russo-Asiatic Consol. concessions n629
Situation seems hopeless....n985
Rust, book on.... 712
Talk on....n791
Ryerson, J. T. & Son, Inc.... 834

## S

S. R. & W., works abandoned mine....n1026
Safety (see also Accidents)
Accident prevention.... 72
Calendar .... 952
Congress in Detroit....473, 590
Cussedness, in Joplin-Miami field....e961
Dust-removal system ....n911
Safety—Continued
First-aid and rescue meet....n*428, *484
First-aid room, equipment.... 490
Gas masks.... 472
Gas masks, all-service....e523
Goggles, use of....e483
Unbreakable ....n*155
Growth of movement.... e2
Hard hats and conservatism .... e43
In hoisting devices.... 524
Inspection, state vs. county ....n827, see also n908
International Mine Rescue and First Aid Meet....e283
Lamps, carbide vs. electric....e762
Life line for signals....n*354
Meeting, Ironwood....n350
Methods at Britannia....*929
Moctezuma celebration ....n866
National Safety Council meeting....n791
Phelps Dodge, work....n*227
Rosiclare contest ....n942
Rules for Utah metal mines.... 619
Screens, portable protecting.... 740
Self-rescuer.... 473
Tap code for miners....letter 700
Saint John, etc., see St. John, etc.
Saint-Smith, E. C., leaves Queensland service ....n948
Salares, Andean....letter 419, correction 534
Salt, in 1925.... 416
In Canada in 1925 .... 221
In Texas and New Mexico.... 675
"Salting," alleged, causes suit....n588
Salvage, truck for....*461
Sampler for tailings....*776
Samplers, ore, electrical timing device...*938
Sampling, apparatus, patent.... 192
Sampling concentrates in bins....*378
San Carlos dam, bids asked....n*704
San Francisco mine.... *55
San Juan County, Colo., hearing on royalties e83
San Miguel and Cusi Mexicana merge ... n63
San Rafael, ore at....n187
New strike ....n943
Shipments....n666
San Rafael y Anexas, report.... 38
"Sanitary engineers".... e3
Santa Anita sold....n743
Santa Eulalia, Mex., limestone replacement deposits....*246, *289, e321
Sapphire fields, Anakie, state aid....e123
Saskatchewan, airplane survey planned ..n786
First oil well....n669
Gold dredge for....n424
To make mineral survey....n107
Sault Ste. Marie, Ont., assay office....n704
Saunders metal.... *12
Saw, circular, portable.... *714
Saw, portable hand saw....n*953
Schaphorst, W. F., on automatic regulation 774
On bearings.... *739
Schools, see Education
Schramm, Inc.... 274
Schwab, C. M., president A.S.M.E....n590
Schwartz, G. M., on Sullivan ore.... *375
Schwerin, M., on Illinois-Kentucky fluorspar letter 623, see also 165, 695, 731, e762, 790
Science, progress of....e483
Scrap metal, production.... 198
Scraper for beaded pan conveyor.... *776
Screen, patent.... 353
Portable, protecting.... 740
Shaking, patent.... 392
Vibrating, ball-bearing ....n833
Vibrating, noiseless ....n*912
Vibrating, patent .... 952
Screening.... 331
Scrivenor, J. B., on tin in Malay States letter 224
Sea water, polar, gold in....1017
Seafoam Mines store ore ....n743
Seamon, Prof. W. H., on specific gravity of solids.... 537
Searchmont, Ont., zinc-lead reported....n862
Secondary metals, production.... 198
Sedimentary materials, preparation for study 430
Selby smelter, thefts at....n626
Selective flotation, see Ore Dressing
Self-rescuer, see Safety
Sellards, Dr. E. H., investigates potash....n541
Seneca.... 344, 467
Mines 1,300 tons per day....n705
Seniors, see Education.
Separation and Separators, see Ore Dressing
Service and its abuse....e363
Sesquicentennial, Japan at ....n350
Seven-day week....e1002
Shaft, Pilares, deepening....*569
Shaft-measuring pockets, new....*222
Shaft coupling, flexible....n*116
Shaft sinking—Junction of shafts.... *55
Methods and costs, American Eagles....*657
Shanghai silver stocks largest in history..n997
Shapley, C., on tailings sampler....*776
Shale oil, see Petroleum, Shale oil.
Shannon Copper may buy Mosqueteros...n1025
Shares—Emotionalism in investment....e523
Auction sales .... 836
Mining, distribution.... 159
Mining, exceed $7,000,000,000....n903
"No par-value".... 392
Prices....*797
Shareholders, organized minorities.... e81
Shareholder's voice...letter 341, see also e81
Valuation .... 638
Weighted valuation....278, *279
Sharpe, A. J. M., expects firmer zinc.... 718
On improvement in zinc....n319
On technical position of zinc....n876
On zinc industry.... 158
Shattuck, "high-grading" .... n63
Shattuck-Denn .... 625
Wins suit....n744
Shear for corrugated sheets....n*834

*Illustrated; e, editorial; n, news

Page
Sheave, head, weight cut.....n*752
Sheldon increases mill output.....n943
Sheridan, J. F. on Panama gold mining..n*1027
Shotover River, Australia, dam completed n709
Shovels—Diesel, high-speed, for shovels...n*74
Compressed-air .....*938
Electric .....*764
New .....n*238, n*714
Power, patent..... 192
Stripping, new .....n*833
Sicily, sulphur mines to be electrified.n190, n863
Sidney.....424, 540
Sierra County, Calif., revives.....n385
Sierra Leone, hematite find.....n1029
Sieve specifications ..... 871
Silesian-American Corp., see Anaconda
Silica, Canada production up.....n586
Silica sand produced at Las Vegas, Nev...n825
Silicosis, South Africa..... 270
Silver—Advertising the use of silver.....e363
And sarcasm .....e842
Bar, prices .....*957
Congress mine, ore possibilities.....*769
Discussed at Amer. Mining Congress.... 990
Eastern states, bulletin on.....1033
Far East absorbs American output..... 197
In Idaho, Utah and Washington in 1924 72
India, currency, etc., see India
Lead-silver concentrating at Hecla.....*444
Lead-silver situation at mines..... 472
Lessening importance?..... 648
Mexico, prices, see below, Silver, Prices
Mexico, production.....n787
Restriction of output suggested.....n907
Mexico, tax reduction.....n829
Mexico, relief discussed .....n866
Mississippi mine.....e642
Montana, in 1924..... 114
Nevada, bulletin on.....1033
Ontario, costs lower.....n745
Production, Jan.-June .....n470
Outlook, pessimism on ..... 518
Pittman silver-purchase bill.....e121, n548
Prices....77, 277, 278, 279, 436, 437, 636, 638, 758, 795, 797, 829, 866
Prices, low, effect of, etc.....e562, n585, 666, 669, e683, 705, 707, 743, 744, 787, 798, 825, 982.
Comstock Merger and drop in silver..e843
Fall affects Canada mines.....n585
Fall affects Guanajuato .....n707, n825
Fall affects Mexican mining n743, n744, n787
Fall affects Tonopah, Nev.....n705
Fall affects Utah metal production....n666
Guanajuato mines suspend n825, see also n707
Guanajuato mines survive drop.....n983
Mexico cuts tax on production.....n798
Mexico mining stocks decline.....n823
Reassurance in situation.....n798
Producers, leading .....1022
Production, eastern states, U. S.....n828
Production, U. S., Oct., 1926 .....n875
Quincy copper mine, silver from.....n109
Shanghai stocks largest in history.....n997
Silver-lead concentration, a problem in.*815
Since 1900..... *5
Situation discussed at Western convention .....n548
Situation at mines.....630, 788
Situation better.....n742
Temiskaming Ry. ore shipments .....n424
Trace .....e162
Silver Charm discovers gold.....n903
Silver King Coalition..... 307
Silver-lead ore in eastern Ontario.....n629
Concentration, a problem in.....*815
Silveretta mill completed .....n*385
Silversmith, dividend.....n583
To drive deep-level tunnel.....n983
Simon Silver-Lead resumes milling.....n466
Simsburg copper mine sold.....n743
Singewald, J. T., Jr., on genesis of Chilean nitrate.....letter 660
Sintering, see Metallurgy
Sitting on top of the world....letter 779, see also 601
Situation at mines....111, 268, 472, 630, 788
Sizer, Fahrenwald, sold.....n431
Sizing agitator, patent..... 352
Skips, see Hoisting
Slag, and metals, granulation of..... 367
Copper, for cement..... 20
In construction.....*285, e323
Plants ..... 114
Use for, wanted.....e323, see also *285
Slate technology, bulletin on..... 790
Slate Lake, Man., gold find.....n828
Slaves, mechanical, and their masters.....e883
Slips, rock.....*413, see also *368
Slocan district, B. C., description, etc.....n673
Sluice box riffle, new..... 194
Sluice boxes, patent..... 790
Small oil operator, plea for.....n553
Smelting—Ancient and primitive..... 451
Chile has four copper smelters ..... 377
Chimney, tallest in America..... 392
Costs at Noranda.....n465
Federal lead smelter.....*364
Flotation improvements affect smelting..e522
Furnaces:
Blower, new type.....n752
Carson patent case, see Carson
Drying, patent..... 632
Electric, patent..... 273
Firebrick lining, plastic.....n*315
Patent ..... 192
Peep-hole door .....n*633
Powdered coal in Japan..... 854
Power-feed stoker, new.....n*431
Reducing, patent ..... 273
Refractories, chrome cement, new ...n593
Refractories, open-hearth steel furnaces 72
Refractories, patent ..... 632

Page
Smelting—Furnaces (Continued)
Reverberatory, at Cananea..... 501
Reverberatory, Carson case, see Carson
Reverberatory, patent .....*952
Tapping machine, patent..... 353
Wall tie blocks, new.....n*315
Zinc, patent ..... 353
Gordon process..... 146
Iron, in Angola.....*175
Roaster, multiple-hearth, for magnesite. 930
Roaster, zinc ore, patent..... 790
Roasting of increasing importance.....n550
Roasting, patent ..... 474
Roasting, pyrites, mechanics..... 738
Tin ..... 860
Zinc, Coley process..... 951
Zinc, electrothermic, patent..... 474
Smith, A. J., on Belmont Copper.....letter 224, see also 24
Smith, H. H., on flotation of Rand pyritic gold ores.....*165, 175, *215
Smith, J., and Hungary..... e42
Smith Power Transmission Co..... 116
Smithers, B. C., property sold.....n704
Smithsonian to get Canfield minerals.....n747
Smoke, disposal at Federal smelter..... 367
Precipitation, Cottrell method..... 72
Precipitation, patent.....273, 632
Sulphur dioxide recovery, patent..... 273
Trail, damage by, to be arbitrated.....n904
Smuggler..... 308
Smuggler Union, report.....1036
Snowstorm reopened.....n625
Snyder steel tie.....n*315
Soapstone and talc.....72, 114, 545
Societies, joiners .....e922
Societies, joint meeting in Denver....n191, e362, n*546
Soc. for Promotion of Engineering Education, meeting..... n30
Society of Economic Geologists, meeting.. 992
Sodium sulphate in Canada..... 857
Solder, Bolivian tin for..... 860
Solder, zinc-cadmium.....n744
Soldering iron, electric, new.....*194
Solids, determining specific gravity..... 537
Solubility of tin minerals.....letter 417
Solution tanks, see Tanks
Sonora, antimony shipments.....n146
Yaquis active .....n742
Sonora Development, strike.....n586
South, non-metallics discussed at Mining Congress ..... 991
South Africa—Bleloch, W. E., and Boksburg Gap theory.....n427
"Cleaner" finance gains.....n471
Copper, prospecting by airplane.....*576
Diamonds:
Alluvial, show increase..... 532
Elandsputte rush .....n151, e203
Production .....n1029
"Rushes" .....n587
Dividends .....n230
Fluorspar mining ..... 936
Gold:
Barberton, renewed interest in.....n587
Costs decline.....n629
Crushing results, July.....n469
Depletion of mines.....n629
Find in Southwest Africa.....n1029
Flotation of pyritic ores.....*165, *215
Fortieth birthday.....e522, n707
Gaika Gold development.....n545
Legislators visit mines.....n867
Mine profit.....n230
New Modderfontein reserves.....n545
New reef.....n669
Percentage of world yield declines.... 618
Production.....n109, 114, 151, 197, 239, 389, 469, 510, 669, 709, 747, 829, 836, 954, 986, 1029, 1035.
Que-Que, find .....n1029
Rand, facts about.....e202
Forty years on .....e522, n707
History of the Rand.....1033
Last area on Rand leased .....n628
Mines profit by watching details..n1029
Taxation high on Rand ..... n29
"Shadow Over the Rand".....n907
Leasing mineral lands..... 288
Mineral production....n68, 389, 629, e1003
Petroleum, interest in .....n469
Platinum:
Disappointing .....n747, n907
Improved recovery.....n469
No glut yet.....e402
Only one producer so far.....n863
Onverwacht output, etc..... n68
Production .....n389, 427, 709
Transvaal Platinum report discouraging .....n948
Present state and future, P. M. Anderson on ..... 270
Rand, facts about.....e202
Forty years on.....e522, n707
High taxation..... n29
Pyritic gold ores, flotation..... 175
Shares advance.....n150
Revenue from mining makes record....n986
Rhodesia:
Asbestos industry..... 288
Copper prospecting by airplane.....*576
Exports to U. S. increase.....n545
News from .....n829
Prospecting.....n110
Report..... 72
Taxation a menace to future..... 270
Transvaal:
Chamber of Mines report.....n712
South African Inst. of Engineers, meeting.n870
South America—Andean salares.....letter 419
South Amer. Gold & Platinum Co. .....*339
Motor-ship for .....n825
South Australia mining..... 675
South Dakota, bentonite.....letter 182
Mining..... 192

Page
South Lake assessment suit.....n265
South Lorrain, Ont., exploration.....n263
Southern Cement Co..... 953
Southern Pac. collects data on minerals.... n27
Southern Rhodesia Base Metals.....708, 787
Prospects .....n510
Southwest Metals, Humboldt smelter to close .....n1025
Soviets, see Russia
Spain, ancient mines..... 451
Iron mining depressed.....n669
Mines discussed .....n830
Placer gold in.....n110
Quicksilver production greater..... 498
Zinc production, 1924..... 93
Spanish Mine developed..... n24
Sparks, G. M., on Yavapai County activity n423
Special Paper Mfg. Co..... 74
Specific gravity of solids, determination.... 537
Specimens, mineral..... 420
Speculation.....e482
Speculator claims, North Butte and.....n187
Speed reducers, new.....n*154, *354
For small machines.....n154
"Spelteritis" ..... 989
Sperr, Prof. F. W., biography..... *31
Sperry, E. A., receives Fritz medal.....n710
Spokane, Wash., meeting .....n70, n590
Spokane, Wash., to have new exchange....n744
Spokane Plastic Magnesite Co..... 930
Springfield Boiler Co..... 633
Spruce mine electrified.....n*384
Spruce Mt., Nev., new road to.....n151
Spurr, J. E.—"Geology Applied to Mining," new edition..... 314
On banding around rock fragments in veins.....*491, letter 700
On Ky.-Ill. ore-magmatic district..*695, *731, e762
On lead-zinc chimneys in limestone 296, see also *246, *289
On magmas, dikes and veins ....134, see also 125
On southeast Missouri ore-magmatic district .....*968
Review of "Dependent America"..... 314
Review of "Geology of Ducktown Area" 352
Review of "Geology of Oil, Oil Shale and Coal" ..... 951
Review of German book on ore magmas 271
Review of "Igneous Rocks of Sudbury" 632
Spry, W.....*549
St. John del Rey, deepest mine.....n191, e441
Labor problem..... 374
St. Joseph Lead buys New York Zinc ....n425
Consolidates mines.....n540
Linares, subsidiary, organized.....n664
Report..... 439
St. Lawrence earthquake.....e201, letter 382
St. Paul mine..... 104
Stabilization discussed at Mining Congress 991
Stamp requirements, Federal repeal urged.n949
Stampede group bonded by Hecla.....n471
Standardization, at Amer. Mining Congress 992
Standard Silver-Lead, fire.....n184
Standards, engineering..... 392
Star mine ..... e42
Develops orebody .....n305
Starter, A. C., new..... 32
Starting equipment for motors.....n*233
Stargo to be sold..... n26
State aid for miner.....e123
State mine inspection opposed, n908, see also n827
Stations, push-button, new ..... 834
Statistical abstract of U. S., book review. 871
Statistical service, new.....e963
Statistics, current, review of....*78, 79, 278, 279, 436, 437, 637, 796, 797, 958, *959
Statistics, metal.....37, 114, 758
Statistics, mineral, from two bureaus.....n264
Statistics of mining industries..... 638
Statistics, mining companies'..... 358
Staunton, W. F., on ore at Congress mine *769
Steam, native, as mineral commodity.....e962
Steam trap, new.....n*633
Steel, see Iron and Steel
Steinman, Dr. D. B., on the engineer.....n312
Stephens-Adamson Mfg. Co.....393, 995
Stevens County, Wash., mines inspected....n711
New ore found ..... n27
Stockpile, redeeming, by chinaman chutes *460
Stockpile crane .....*740
Stock (securities), see Shares.
Stoddard, J. C., on scraper for pan conveyor .....*776
Stoping—Ground classification in ...*368, see also *413
Methods at Britannia .....*924
Mineralization, formation of orebodies 430
Mineralization, ore cavities through ...e321
Narrow, and bigger profits .....e442
Retreating-bench, proposed .....*255
Storage batteries, see Electric.
Storing explosives .....*804
"Story of Copper" film .n145, n265, n360, n863
Stotter Metal Co. bought by Balbach ....n189
Stowell Gold ..... 906
Straight tracks .....e842
Stratification in ore dressing .....n673
Stratton Estate starts diamond drilling..n864
Strauss, L. W., on Bolivian tin veins letter 381 (see also Bolivia)
Strikes, see Labor.
Structural design, practical, book review.. 871
Sub Nigel, narrow stopes .....e442
Report .....n907
Subway construction a mining problem ..e362
Success in mining .....e763
Sudbury, complex ores developed .....n629
Development .....n628
Nickel-copper, geology of ..... 632
Sullivan mill and mine, see Consol. M. & S. Co.

*Illustrated; e, editorial; n, news

Page
Sullivan Mach. Co. .....194, 715
Sulphate of sodium in Canada ..... 855
Sulphide ores, genesis of....letters 21, 340, 341
Massive, blasting of.....letter 464
Selective flotation ..... 392
Sulphur—Chinese ..... 430
Elimination from iron studied.....n785
Freeport Texas leases lands .....n470
Gulf Coast deposits .....*844
In iron ore .....n664
Mines, Sicilian, to be electrified ..n190, n863
Mining, patent ..... 712
Recovery, German processes ..... 816
Recovery, patent ..... 632
Texas shipments .....n666, n876
Treatment method at Humboldt .....n466
Union Sulphur investigates deposits ...n784
Sulphur dioxide recovery, patent ..... 273
Sulphuric acid, Mond Nickel doubles plant.n986
Sumitomo production .....n109
Summerville Lead ships.....n1024
Sump drainage, hydraulic educator .....*621
Pump for ..... 715
Sumpter smelter may resume .....n107
Superior McCully gyratory crushers.....n*995
Support, mine, discussed .....n711
Surplus, investment of .....e801
Survey, aërial, of Alaska .....n465
Airplane survey of Saskatchewan planned n786
Loads, concentrated, on measuring tapes.1033
Underground, paper on.....1033
Underground orientation, Weiss method letter 820
Surveyor's manual ..... 715
Sutton Lake, Ont., bulletin on .....n591
Swansea Consol. bought by French.....n1025
Swauk district, Wash. .....n*583
Sweden, gold find reported .....n747
Iron and steel still depressed .....n226
Mining, paper on ..... 712
Sweet, Prof. A. T. .....*193
Switch, parallel-throw .....n*32
Kick switch plate .....n*834
Section .....n*155
Switchboard for substation control .....n*116
Switzerland, iron ore found .....n266
Sykes universal flexible coupling .....n*32
Sylvanite mine .....151, 230, 1023
Symbols for mill flow sheets.....*608, letter 778
Synthesis, wonders of .....e923
Synthetic age .....e322, e923

## T

"Tabco" dirt-removal system .....n911
Taber, S., on origin of veins .....letter 858
Taber, W. B., .....*713
Tailings sampler .....*776
Tait, P. G., on flotation of Kalgoorlie gold. 20
Tait, W. J., on repair of pulley .....*740
Talc and soapstone in 1924.....72, 114
Canadian ..... 930
Canada production increases .....n545
Production, 1925 .....n311
Talley, R. E., portrait.....*990
Tamarack and Custer, "follows ore".....n862
Tampico, improved shipping facilities .....n389
Tanganyika Concessions, report ..... 479
Tanganyika Goldfields, new tin field.....n545
Tanks, solution, protection from freezing..*621
Tantalum in 1924 ..... 114
Tap code for miners .....letter 700
Tapping machine for furnaces, patent .... 353
Tariff—Asbestos, see Asbestos.
Commission, permanent, suggested..... n69
Copper, see Copper.
Magnesite, see Magnesite.
Pig iron, see Iron and Steel.
Tungsten, see Tungsten.
Tasmania, reorganizes mine department...n311
Mining, report .....1033
State aid for miner.....e123
Taxation—Arizona mines and railroads pay 50% of state tax .....n347
Bullion tax appeal, Nevada, lost.....n539
California .....e203
Discussed at Amer. Mining Congress... 988
Electric Point gets big reduction..... n27
Federal stamps, repeal urged.....n949
Local, increase of .....e203
Michigan, assessment suit postponed....n265
Taxation may be lowered .....n347
Oklahoma cannot tax Indian land ore..n742
Revenue act revision .....n913
United States, investigating.....n989
United Verde Ex., county tax..... n23
Valuations, disputed ..... 170
Taylor, S. A. .....*549
Taynton, M., on encouragement for mining engineers.....letter 101
Tchiatouri, Russia, manganese mining....*964
Technical publications.....192, 352, 391, 430, 474, 513, 632, 675, 712, 790, 871, 951, 1033.
Teck-Hughes ..... 230
Manager gets novel bonus .....n905
Mill nears completion.....n746
New oreshoot .....n544
Plans new mill .....n426
Report ..... 836
Temiskaming, report .....n348
Temiskaming Ry., silver ore shipments...n424
Temperature-finding device.....n*833
Tennessee Copper, report ..... 835
Tennessee, mineral resources ..... 632
Tennessee mine resumes shipments.....n423
Tennessee Mineral Products Co.....*692
Tex rope drive .....*538
Texas, potash .....n384, e521, n667, n826
Sulphur shipments .....n666, 876
Western, geology .....675
Texas Gulf Sulphur, reports.....718, 798, 836
Dividend ..... 876
Operations, etc. .....*844
To have "no par" stock ..... 239
Texas Salt Co., new shaft.....n981
Thomas, K., report criticized.....n267
Thompson, Col. W. B.....*631
Thorium, new uses sought.....n424
Thorne, W. E. biography ..... *4
Thum, E. E., on copper slag in construction .....*285, e323
On cutting with oxy-illuminating gas.. letter 304, see also issue of July 17, front cover.
Thurmond, F. L., on Canyon Diablo meteorite .....*817
Tie, latest steel cross-tie.....n*315
Steel, for main-line service.....*715
Tie blocks for furnaces.....n*315
Tigre ..... 907
Tilford, C. E., on claim holders..letter 534, see also 303.
On war and war minerals.....letter 342
Timbers, mine, see Mine Timbers.
Time-card receiving box .....*461
Timer, electric, for ore sampler.....*938
Timmins, N. A., and mine .....*724
Buys Jamieson properties .....n986
Exploration in Red Lake .....n147
Options Woman Lake property.....n189
Tin—Assaying, error by Pearce-Low method.*616
Bolivia, geologic features, see Bolivia.
Bolivian, purity ..... 860
Burma, discovery .....n231
Cassiterite, solubility.....letter 417
Cornwall mining gains ..... n29
Demand strong .....n505
Dredge, Malay States, view .....*298
Excitement in London.....n587
Find in Uganda .....n867
Future discussed .....n674
In cassiterite, determining..... 930
In foreground in London .....n907
King Island, Australia, find .....n110
Malay States, see Malaya.
Market strong.....n510
Mills galore in Joplin district.....e243
New Pretoria Silver Lead finds lode....n629
Ores, secondary enrichment.....letter 417
Placer mining, article on ..... 712
Position .....n231
Price, chief topic in London .....n669
Drop not regrettable .....n829
Optimism despite low price.....n787
Prices ..n310, 436, 437, 638, 758, 797, 958, *959
Renison Bell field, New Zealand .....n828
Search for deposits .....n708
Situation .....e561
Smelter in Canada may benefit U. S....n986
Smelting ..... 860
Solubility of tin minerals.....letter 417
"Spelteritis" ..... 989
Tailings at Llallaga.....letter 144
Tanganyika Goldfields has new field....n545
Tintic district ..... 307
Tintic Standard, report..... 954
Dividend .....1036
Titanium in 1924 ..... 114
Minerals ..... 780
"Today and Tomorrow," book review.... 474
Todd, C. T., see Oneal, E. H.
Tom Reed, leasers active .....n385
Tomboy Gold, may close plant.....n1026
Report .....1035
Tonopah district (Nev.), affected by fall in silver .....n705
Conditions normal .....n306
Production .....543, 945
Production up .....n190
Tonopah (mine).....*724, see also *684
New oreshoot at Gowganda.....n981
Passing .....e403
Report ..... 759
Tonopah Belmont .....24, 467
Belmont Copper not connected with..letter 224
Hamilton plant nearly ready.....n149
Mill ready soon.....n65, n*383
Passing .....e403
To enlarge mill .....n466
Water supply assured .....n263
Tonopah Canadian .....147, 467, 586
Buys more property .....n827
Drifting record .....n67
Starts new mill .....n*388
Tonopah Divide, to increase capital.....n263
Tonopah Extension .....306
Loses bullion tax appeal .....n539
New oreshoot .....n189
Tonopah Western .....306
Tools, small, two new .....*274
Topley, B. C., gold-silver find.....n108
Topographic mapping, Rocky Mountain States .....n551
Topographical drawing notes ..... 392
Torch, cutting, uses illuminating gas....n*833
Torch, oil-burning, uses suction.....n*792
Tough-Oakes .....230, 706, 746
Tough-Oakes Burnside ..... 151
Towagomac Exploration.....145, 827
Trace, a, and a trace .....e162
Tracing paper, new ..... 74
Track end for dump .....*142
Track shifter, patent ..... 192
Tracks, straight .....e842
Tragedy over mining claims .....n347
Trail, B. C., antimony refinery planned ..n862
Trail smelter, see Consol. Mining & Smelting Co.
Tramways, aërial .....n*24
Cable, electrically operated.....*1018
Patent ..... 632
Transfer gate for waste and ore.....*538
Transite board, how to cut..... 379
Transmission, variable-speed .....n*514
Transmutation of metals.....e3, letter 181
Transportation, U. S., studies.....n705
Transvaal, see South Africa.
Transvaal Platinum Co. .....427, 747, 907
Report ..... n28
Report discouraging .....n948
Trap, steam, new .....n*633
Trap, valve, high capacity.....n*953
Travel, earth-wave, see Geology.
Traylor Vibrating Co. ..... 912
Treadwell-Yukon, shipments, etc.....n25, 825
To enlarge mill .....n507
Treasure Hill, ore find .....n627
Trend in mining .....e163
Trent Co. ..... 194
Triangulation system, Mich. Coll. of Mines. n25
Trimmer, M. A. on homestead act....letter 535
Trimountain on profit basis .....n540
Trinidad Elec. Transmission Co..... 354
Tri-state district, see Joplin-Miami.
Tri-State Producers, election .....n870
Trolley for small hoists .....n*194
Tropics, labor and machinery in.....e322
Mining problems in ..... 373
Truck for salvage work .....*461
Trusts discussed at Amer. Mining Congress 988, 990
Tuberculosis, South Africa ..... 270
Tucson, Ariz., lead smelter for.....n187
Tufts, rating of professors by students....e201
Tulsa Lead & Zinc ..... 865
Tungsten—Boulder Tungsten increases production .....n783
Chinese production increases .....n264
Detection .....1022
In 1924 ..... 114
Tariff, higher duty asked .....n627
Application may be withdrawn ....n826
Tunisia, mineral production, 1925 ..... 180
Phosphate production declines .....n266
Tunnel mine busy .....n540
Tunnels, Cascade, record advance .....n511
Drifting record? .....e802
Drifting record at Gowganda ..... n67
Low-cost driving .....n783
Turbine, for different operating conditions.n354
Largest .....n633
Turnings, iron and steel, separating from monel ..... 100
Turrentine, J. W., book on potash.....*430
Tuthill, S. S., on "spelteritis" ..... 989
Tyee smelter to be lead furnace.....n146
Tyrrell, G. C., on concentration of solution values .....*1019
Tyrrell, J. B., on Beaver Auxiliary..letter 533, see also 470.

## U

Uehling Instrument Co. ..... 115
Uganda, report of Geological Survey.... 513
Tin find .....n867
Underground marble quarry, views...*244, 245
Underground orientation, Weiss method letter 820
Underground surveying, paper on.....1033
Union Carbide buys a U. S. Vanadium plant .....n585
Buys U. S. Vanadium Co. .....n825
Union Corp. bids for Geduld East.....n190
To lease Geduld farm .....n747
Union Minière, see Katanga.
Union Sulphur investigates deposits.....n784
United Algoma Mines ..... 470
United Diamond Mines of British Guiana..n150
United Eastern may drop Jarbidge option.n426
Report ..... 38
United Langi Logan closes .....n948
United Metals consolidates properties.....n504
United States, dependence of.....e161
"Dependent America," book review.... 314
Mineral production will break record....n705
National wealth and income ..... 871
Prosperity .....*772
Revenue act revision .....n913
Statistical abstract, 1925 ..... 871
Taxation system, investigating.....n989
U. S. Board of Tax Appeals, disputed valuations ..... 170
U. S. Bureau of Mines, see Bureau of Mines.
U. S. Geological Survey, see Geological Survey.
United States mine ..... 307
United States of Europe .....e603
United States Smelting, Ref. & Mining Co., Midvale flotation mill enlarged.....n543
Finds copper in Rouyn.....n946
Report ..... 599
U. S. Steel Corp., report ..... 239
Dividend, stock .....e1001
U. S. Vanadium sells Rifle plant.....n585
Sold .....n825
New organization .....n982
United Verde, coyote blast breaks 105,000 cu. yd. .....*44
Accident, blast kills two.....n948
Concentrator, new .....*976
Open pit practice ..... 192
United Verde Exten., buys Bisbee Queen..n705
Buys into Nichols Copper .....n226
County tax adjusted ..... n23
Enters Canada .....n582
United Western now Western Apex.....n511
Unity Valley Oil Co. ..... 669
Universities, see Education.
Univ. of Arizona, see Arizona Univ.
Univ. of North Carolina, see North Carolina Univ.
Unloader, compressor, faulty operation...*1019
Unloading machine for cars, new.....n*155
Uranium in 1924 ..... 114
Utah—Dividends 10% greater than 1925..n505
Gold, silver, copper, lead, zinc in 1924. 72
Metal production .....n666
Mining dividends .....n148
Mining generally prosperous.....n307
Oil, first gusher controlled ..... n23

*Illustrated; e, editorial; n, news

Page
Utah—Continued
Potash found ....n826
Production will equal 1925 ....n786
Safety rules for metal mines.... 619
School land problem ....n546
Smelter improvements ....n*346
Utah-Apex .... 307
Reduces dividend .... n65
Report ....876, 954
Utah Copper .... 307
Camp, new ....n542
Financial statement ....n875
Magna mill, lime circuit ....223, 898
Metallurgical control at .... 379
Repair and maintenance ....*609
Report .... 318
Utah-Delaware .... 307
Utility Mfg. Co. .... 154

## V

Vail, W. L., on Mexican mining laws....n823
Validity of crown grants ....n231
Valuations, disputed, before U. S. Board.. 170
Valves, lead-lined, for leaching.... 615
For rock drill, patent.... 952
Pump, stream-line ....n*154
Rock-drill, patent .... 632
Two-piece bonnet ....n*274
Van Ryn Gold .... 1029
Van Soelen, J. C. S., on ore veins..letter *777
Van Stone Lead-Silver incorporated....n743
Van Wert, L. R., goes to Carnegie Institute ....n*153
Vanadium, find near Magdalena, N. M....n308
Arizona properties to be prospected....n982
In 1924 .... 114
Recovery, patent .... 392
Vancouver Board of Trade, tour....n511
"Vano" blower ....n753
Varley, T., on reagents used in flotation..n868
Veins, see Geology.
"Vellux" tracing paper .... 74
Venezuela, iron in....letter 304, see also 84
Petroleum production increases....n984
"Ventair" blower ....n753
Ventilation—Air filter, new ....n792
Air flow, mine ....1033
Blowers, new ....n753
Cooling mine air ....e842
Fan, exhaust, new ....n*911
Fan, low-power exhaust ....n792
Filter for air, new .... 912
New book on .... 993
Patent system .... 353
Problems studied ....n386
Surface equipment, Modderfontein .... 513
Venture, none without venturing....e481
Verde Central develops ahead ....n423
Progress ....n943
Vermont Marble Co., quarry views...*244, *245
"Versuch, etc., Magmatischen Erzlagerstätten." .... 271
Veta Grande ....*324
Cyanide plant, view....*645
Vibrating screens ....392, 833, *912, 952
Victoria, deep lode gold mining ends....n948
Deep river beds disappoint ....n1029
Victoria geology, bulletins .... 513
Victoria Copper has water power ....n904
Victoria Mining Co. sued by Gogebic County, Mich. ....n189
Victoria Syn. develops Paradise mine....n982
Vinegar, breaking rock with....letter 342, see also 48.
Vipond ....146, 310, 746
Vipond:
Mill records ....n1023
Report ....n470
To buy British Porcupine ....n707
To increase capital ....n267
Vipond Consol., report .... 517
Buys British Porcupine ....n954
Virginia, iron, lower freight rates asked..n425
Vise, side-opening ....n*792
Volatilization, see Metallurgy.
Volunteer .... 347
Von Giesche, see Harriman-Anaconda.
Vulcan Iron Works ....476, 752

## W

WAD Syn .... 29
Wade mine .... 104
Bought by Cleveland-Cliffs ....n229
Wages, see Labor.
Waihi Grand Junction to be worked....n470
Waite-Montgomery ....*724
Curtails work ....n267
Diamond drilling starts ....n628
Magnetometric surveys....n348
Waldron, J., Corp. .... 154
Waldron Quicksilver operates furnace....n*744
Wales, copper industry declines....n389
Walker, G., gold find on Rand....e522
Walker, G. L., on prospecting by airplane.*576
Wallace, J. D. & Co. .... 714
Wallace, R., on coke-burning stoves for sintering ....*412, letter 535
Wallace, Idaho, Boy Scouts locate claims... n64
Walter, R. J. .... *71
Wanderer reopened .... n29
Optioned ....n867
Wappat Gear Works .... 953
War Minerals Relief ....letter 342
All claims settled ....n984
Ward-Leonard control system, hoisting.... 527
Ward's Natural Science Establishment.... 420
Washington State, gold, silver, copper, lead, zinc in 1924 .... 72
Lepidolite find ....n*468
Waste, uses of ....e763
Waste and ore transfer gate ....*538
Water and magmas....e402
Waterloo, N. M., silver-lead....n983
Waterval (Rustenburg) Platinum .... 829
Watson, E. C., on stockholder's voice..letter 341, see also e81.
Watson, J., on Rand's fortieth birthday..n707
Watt, C. S., on dump doors in winze sinking ....*141
On waste and ore transfer gate ....*538
Wave travel, see Geology.
Webb, C. J., on electric tramway ....*1018
Weed, W. H., and G. G. Rice....e602
Weeks, W. S., on working model, skip dump ....*739
Publishes book on mine ventilation...n*993
Weinig, A. J., on angular fragments in veins ....letter *1020, see also letter 700
Weiss method, underground orientation letter 820
Welding, acetylene generator, safe....n315
Automatic, with electric arc ....n*911
Bond, copper alloy....n*753
Electric ....e163
Welder and air compressor in one....n274
Welding and the welder ....e282
Welge, D., on faulty operation of compressor unloader ....*1019
Wellman-Seaver-Morgan Co. .... 994
Wenden Copper ....226, 625
West, the ever-new ....n551
West Australia Manganese Co. .... 948
West Coast Iron & Steel Co. organized....n743
West End Consol., ships from Mabel....n541
Ships high-grade from Mabel....n742
West Gold, shipping ....n1028
West Kootenay Power, new station....n265
West Rutland, Vt., marble quarry, views *244, 245.
West Virginia Rail Co. ....32, 715, 834
Western Apex ....347, 511, 947
Western Australia ....e923
Government help for mines ....n1029
Oil problem .... 430
Report .... 712
Report on, criticized ....n267
Revival attempted ....n708
Western Feldspar Milling Co. .... 585
Western Lead, suit dismissed .... n68
And C. C. Julian ....e803
Western States Joint Convention....n*546
Westinghouse Elec. & Mfg. Co. ....431, 792
What we face ....e643
Wheeler, H. A., on oil "famine"....letter 579
White, J. C., on foremen .... n69
White Caps .... 543
Rich find ....n942
White-Delf ....65, 583, 706
Ships lead-silver ore ....n908
White Hills Silver .... 108
White man's burden ....e641
Whitewater, dividend ....n583
Whiting .... 536
Wigwam Silver seized ....n745
Wilkinson, A. D., on Cananea reverberatory practice .... 501
Willamette Iron & Steel Wks.... 74
Williams, J. W., on Dorman volatilization, letter 22.
Williams Gauge Co. .... 154
Wiluna, development encouraging ....n907
Future of ....n867
Windermere area, B. C., geology of.... 430
Winters, A. W., on lure of mining...letter 534
Winze sinking, dump doors in ....*141
Wisconsin zinc fields active ....n904
Witherbee, Sherman & Co., active....n540
Wolf Tongue .... 626
Woodbridge, D. E., obituary of G. A. St. Clair .... 113
On Gogebic Range history .... 848
On iron country accidents ..letter 859, see also Iron and Steel.
Woman Lake, see Red Lake.
Wood preservation, see Mine Timbers.
World changes ....e643
World Exploration reopens Copper King..n982
World's up and downs ....e883
Worm gear power reducer ....*354
Wormser, F. E., review of "Location of Mineral Fields" .... 790
Review of "Testing and Estimating Alluvials" ....392
Worthington Pump & Mach. Co.... 715
Wright, D. G. H., on Red Lake.... *15
Wright-Hargreaves ....230, 508
Deeper development ....n986
Expansion ....n745
Program ....n544
To enlarge mill ....n1023
Wrigley makes shipments ....n107
Ships concentrate to Belgium .... n24
To build concentrator ....n187
Uses sea water for flotation....n629
Wyoming, bentonite discovery ....n310
Oil .... 675
Platinum .... 675
Zinc mine, first ....n824

## X

Xanthate, made by Apache Powder ....n424
Manufacture of .... 570
Manufacture, patent .... 952

## Y

Yaquis active in Sonora....n742
Yavapai County, Ariz., activity....n423
Yavapai Onyx, find ....n786
Yellow Pine, Idaho, antimony and quicksilver .... 675
Yellowstone minerals .... 114
Yokobori, Dr. J., on mining in Japan....n506
Young, G. J., on mining since 1900.... *5
On repair and maintenance, Magna mill.*609
On Sullivan mine and mill....n749
Supervises annual review number ....n*909
Yukon, southern, geological map ready....n146
Yukon Gold discontinues dredge....n108
Tin dredging, Malaya, view....*298

## Z

Zacatecas revival ....*324
Zambrano, J., on chemical experiments, letter 181.
Zeigler, W. L., on concentrating at Hecla..*444
Zinc—Belgium, paper on ....712
Smelters fear electrolytic production..n517
Bromine in chlorination of zinc sulphide 338
Canada, production increases ....n190
Copper-zinc at Cold Lake, Man....n545
Eastern states, bulletin on ....1033
Exports and imports .... 439
Find in Rambler mine ....n824
French imports increase in 1925....n109
Furnace, patent .... 353
High-grade .... 901
Improvement seen by Sharpe....n319
In Idaho, Utah and Washington in 1924. 72
Italy conserves zinc for own use....n545
Korean mining ....n188
Lead-zinc ore schedules .... 822
Lime silicates, Ducktown Area.... 352
Metallurgy, patent .... 952
Montana, in 1924 .... 114
Nevada, bulletin on ....1033
November stocks and shipments....n997
Ore roaster, patent .... 790
Poland, industry reviving .... n63
Production drops ....n584
Prices ..436, *437, 638, 718, 758, 797, 958, *959.
Producers, leading ....1022
Production .... 876
Production, eastern states, U. S. ....n828
Recovery, patents .... 790
Retorts, charging apparatus .... 420
Sales, more light wanted...e681, letter 701
Scrap, production .... 198
Sharpe, A. J. M., on industry...158, 319, 718
Since 1900 .... *5
Situation .... n29
Situation discussed .... 989
Situation at mines....111, 268, 472, 630
Slab, price curves ..*77, 277, 636, 795, *957
Slab, specifications .... 901
Smelter near Saguenay proposed....n587
Smelting, Coley process.... 951
Smelting, electrothermic, patent.... 474
Southeast Missouri ore-magmatic district.*968
Spain, production in 1924.... 93
Statistics, current, review of....278, *279
Sullivan ore, microscopic features....*375
Syndicate being formed .... n29
Tampico shipping facilities improved...n389
Technical position is sound ....n876
Wisconsin fields active ....n904
Wrigley concentrate for Belgium.... n24
Zinc-cadmium solder ....n744
Zinc-lead, Finland deposits developed....n306
Find near Searchmont, Ont. ....n862
Leaching with gas-house liquor .... *855
Okla.-Kan.-Mo. field .... *604
Situation at mines .... 788
Zinc sulphide, chlorination, bromine in... 338
Zirconium-hafnium separation, patent.... 273
Zonolite Co. erects plant....n*508

*Illustrated; e, editorial; n, news